14th ANNUAL CONFERENCE

INDIAN ASSOCIATION FOR SOCIAL SCIENCES AND HEALTH (IASSH)

in Collaboration with

Gokhale Institute of Politics and Economics, Pune

THEME:

Health, Gender and Development: Emerging Issues and Challenges

&

Seventh Pre-Conference Workshop

ON

'Approaches to Social Science Research'

VENUE:

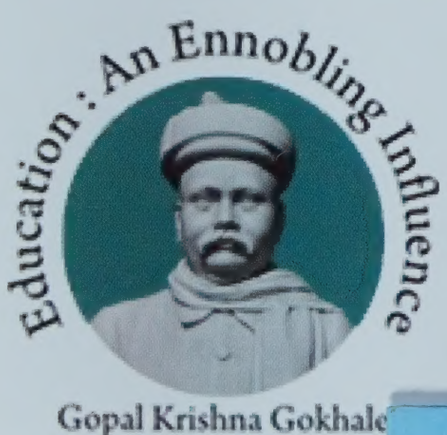
Gokhale Institute of Politics and Economics, Pune

DATES:

Conference: September 23-25, 2016

Pre-Conference Workshop: September 20-22, 2016

We are Thankful to:



ouncil of
ce Research

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In
7/10/16

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Website: **http://www.iassh.org** E-mail ID: **iassh2004@gmail.com**

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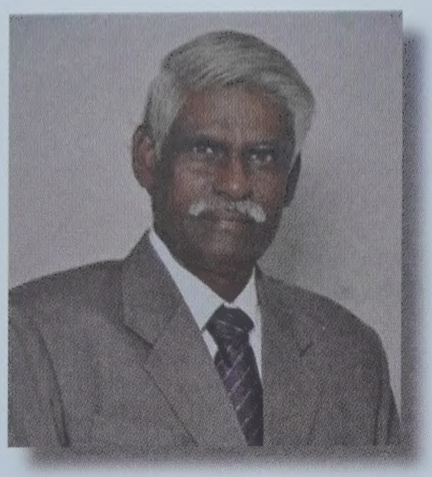
IASSH President's Message



The field of social sciences and health, and the relationships between them are growing in importance, because of the nature of issues faced today. Addressing many of these problems requires inter-disciplinary approaches for a better understanding of these issues. The Indian Association for Social Sciences and Health (IASSH) has been working towards this end through the regular organisation of conferences for the past 13 years on topical themes that relate social sciences to health. This year, the focus of the 14th Annual Conference of IASSH is on 'Health, Gender and Development: Emerging Issues and Challenges', in an effort to have academic discussion and debate reflect on the relationships between the three areas of study: Health, Gender and Development.

Four sub-themes have been developed for the technical sessions in the conference, which include: Health Programmes and Development Policies, Health and Well-being, Health, Gender and Environment, Health and Development: Research and Policy. These sub-themes are expected to encourage researchers from a variety of disciplines, and from different countries in the world, to contribute new and interesting perspectives, approaches and data towards themes that have already had significant academic contribution, yet which remain especially relevant today.

For this year's conference, I invite you to further think about the theme of the conference in terms of three increasingly important angles: a) the changing demographics all across the world, which is giving rise to a rapid increase in the number of elderly persons and its implications; b) the need for bottom-up approaches in prioritising grassroots voices rather than top-down approaches when it comes policy-making and evolving suitable programmes and schemes; and c) about the types of research methodologies that are better suited to understand the themes. IASSH strongly believes that many technical sessions at the conference will give many opportunities, to do so providing a good platform in this regard.

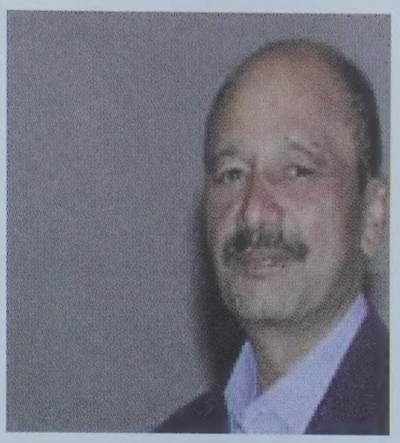
The Centre for the Study of Social Exclusion and Inclusive Policy, at the Gokhale Institute of Politics and Economics, Pune, has been working towards the promotion of social sciences and health for a long time, and it is therefore apt that they host this year's IASSH conference. The joint efforts of IASSH and local organisers, in addition to the dignitaries who will be attending the event, will certainly make the 14th Annual Conference a memorable one. On behalf of all the IASSH members, I extend my gratitude to the local organising committee led by Prof. Rajas Parchure, Director, Dr. Anjali Radkar and Dr. Prashant Bansode, Associate Professors, Centre for the Study of Social Exclusion and Inclusive Policy, for their committed efforts towards ensuring a comfortable stay of the delegates and arranging the necessary infrastructural facilities for smooth conduct of various sessions.

With Warm Regards

Prof. S. Siva Raju
President, IASSH

Message from Director

Gokhale Institute of Politics and Economics



It gives me immense pleasure to host the 14th Annual Conference of Indian Association for Social Sciences and Health. This is an opportunity for Gokhale Institute of Politics and Economics to welcome the delegates and students across the country, who would participate in the conference and grace the occasion. The theme of the conference, 'Health, Gender and Development: Emerging Issues and Challenges' is multidimensional and underlines its significance from the angle of social and economic development.

Gokhale Institute of Politics and Economics was conceived in 1930 by the Late Shri Rao Bahadur R. R. Kale, M.L.C. of Satara, as a Centre for higher learning and research in economics. From those days, it has evolved into a premier institute of advanced study in economics, having faculty and alumni who have distinguished themselves nationally and internationally as academicians, policy makers and consultants. The institute has also evolved as an economics institute, and increasingly focuses on an inter-disciplinary approach to the subject. Our excellence, as an institute of higher learning, has been recognised both in India and abroad. The Reserve Bank of India, the Ford Foundation and the Planning Commission each instituted chairs for distinguished faculty in Finance, International Economics and Planning, and Development, respectively. The institute is now a deemed University since 1993.

The Institute houses five major research centres: the Agro-Economic Research Centre (Ministry of Agriculture); the Population Research Centre (Ministry of Health and Family Welfare) Centre for the Study of Social Exclusion and Inclusive Policy; Finance Research Unit sponsored by Reserve Bank of India; and D. R. Gadgil Centre. The Institute publishes two research journals — "Artha Vijanana" and "International Journal of Development and Conflict" (IJDC). On the teaching side, the Institute administers four Post Graduate Programmes and an active Ph.D. programme.

Health Economics is a rapidly growing subject in India, whose importance only grows further in the years to come. Therefore, the Institute definitely values this opportunity given to us by IASSH to host the 14th Conference. I wish the conference a great success and believe that deliberations in the conference would be fruitful. Research findings of the participating scholars could be translated into policies and programmes. I presume all of you have a comfortable stay here in Pune and at Gokhale Institute of Politics and Economics.

Prof. Rajas Parchure
Director, Gokhale Institute of Politics and Economics, Pune

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Local Organising Convenors:

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Centre for the Study of Social Exclusion and Inclusive Policy
Gokhale Institute of Politics and Economics, Pune – 411 004

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About IASSH

INDIAN ASSOCIATION FOR SOCIAL SCIENCES AND HEALTH (IASSH)

Registration No. 218/2006AP

The Indian Association for Social Sciences and Health (IASSH) is a registered society. IASSH has now more than 1,200 life members.

VISION

- To position IASSH as a knowledge transformation organisation in Social Sciences and Health Research in India.

GOALS

- To encourage YOUTH participation and develop knowledge transformation in Social Sciences and Health Research.
- To attain Sustainable Development in capacity building of Youth in Social Sciences and Health Research.

The Aims and Objectives of the Association are as follows:

- To bring together scientists, practitioners and policy makers from various disciplines on to one forum to explore and work in the areas of social and cultural dimensions of illness, health and health care in the country
- To encourage mutual and collective efforts to develop, promote and apply health and social sciences
- To improve health via inter-disciplinary and trans-disciplinary approaches
- To assess current status and best practices in relation to application of social sciences in health
- To strengthen networking with other sub-regional, regional and trans-regional organisations linking social scientists, health scientists, health activists and policy makers
- To organise seminars, workshops and conferences to enable sharing of research results and experiences relating to the social aspects of health
- To disseminate new theories and innovative inter-disciplinary and trans-disciplinary approaches for understanding and addressing emerging health problems
- To initiate steps to evolve an equitable health care system in the country through appropriate and affordable health sector reforms
- To publish books, journals and such other literature that will promote the dissemination of knowledge in the field of health social sciences
- To enable scholars in health social sciences to enhance their career opportunities and fulfil their professional commitments
- To do all such things and perform all such acts as are necessary and appropriate for the achievement of any or all of the above objectives.

For more details, please visit IASSH website: http://www.iassh.org

GOKHALE INSTITUTE OF POLITICS AND ECONOMICS, PUNE

(Deemed to be a University u/s 3 of the UGC Act, 1956)

About the Institute

Gokhale Institute of Politics and Economics is one of the oldest research and training institutes in economics in the country. It was founded on the 6th of June 1930 with an endowment offered to the Servants of India Society by the late Rao Bahadur R.R. Kale, Member of the Legislative Council from Satara. The Servants of India Society, founded by the late Shri Gopal Krishna Gokhale, is the Trustee of the Institute. The Institute is registered under the Societies Registration Act, 1860, and the Bombay Public Trusts Act, 1950.

The object of the Institute has been to conduct research into the economic and political problems of India and to train research workers in these subjects. Under the pioneering leadership of the late Professor D.R. Gadgil, its first Director, the Institute set the highest standards for quality research, teaching and training in a number of branches of economics.

Keeping in view the eminence of the faculty, the contribution of the Institute has made in teaching, training and research in economics, availability of physical infrastructure and potential of the Institute, the Government of India, on the advice of the University Grants Commission, awarded the Institute the status of a Deemed to be University on May 9, 1993, the birth anniversary of the late Shri Gopal Krishna Gokhale, after whom the Institute is named. The National Assessment and Accreditation Council has accredited the Institute with grade A+.

Research

The main thrust areas of the Institute, which have developed over the years through financial assistance from various sources, are agricultural economics and rural development, population studies, input-output studies for planning and development, microeconomics, macroeconomics, monetary economics and finance, public economics and international economics.

Various ministries and public funding agencies, including the Government of Maharashtra and private foundations such as Sir Dorabjee Tata Trust, financed the research activities of the Institute in its early years. Subsequently, in 1954, the Union Ministry of Food and Agriculture established, and has

supported since then, the Agro-Economic Research Centre of the Institute. During the early fifties, the Rockefeller Foundation made a substantial grant, spread over several years, for the conduct of a research programme in rural demography. By the time this grant period came to an end, the Union Ministry of Health, which had given grants for conducting some specific demographic studies in 1954-57, decided in 1964 to strengthen and expand the research work on population by financing, on a continuing basis, a Population Research Centre as an integral part of the Institute. The Ford Foundation gave very generous financial assistance for more than a decade beginning in the year 1956. Later, the Foundation, in collaboration with the Planning Commission, provided a separate grant for research and training in the areas of planning and development, mainly devoted to input-output studies. The Planning Commission has also given an endowment grant to the Institute to establish a chair and a unit for promoting teaching, research and informed debate on all issues relating to planning and development. The above-mentioned chair is named the **'Professor D.R. Gadgil Chair of Planning and Development'**.

In 1962, the University Grants Commission recognised the Institute as a Centre of Advanced Study in Agricultural Economics, and later, in 1964, as a Centre of Advanced Study in Economics. In 1977, the UGC, as a part of its Area Studies Programme, established a Centre of Study of the Economies of East European Countries. In the same year, the Reserve Bank of India instituted a chair of finance. In 1989, the Ford Foundation gave a generous endowment grant to fund a chair and to establish a section in international economics to carry out research activities in international economics and related subjects. This grant also included support for the post of a Librarian and for acquisition of books and journals. Similarly, in 2005, the Kamalnayan Bajaj Trust gave a generous grant to fund a chair of Industrial Economics.

The University Grants Commission, New Delhi, has sanctioned the Centre for Study of Social Exclusion and Inclusive Policy (CSSE and IP) in 2008 to carry out research and teaching in the areas of social exclusion, discrimination and inclusive policy.

Teaching

The Institute was initially affiliated to the University of Mumbai, conducting the M.A. Programme in economics and supervising the work of students working towards research degrees of that University. In 1949, with the establishment of the University of Poona, the Institute became a constituent recognised institute of the new University. Till 1993, the Institute functioned, for all academic purposes, as the Department of Economics of this University. With the decision of the University to establish a separate Department of Economics at its campus, the Institute, as a Centre of Advanced Study in Economics, was granted effective autonomy in 1986 in designing courses, teaching and examination of the M.A. degree in economics. As stated earlier, the Institute has been granted the status of a Deemed to be University by the Government of India with effect from May 9, 1993, awarding its own M.A. and Ph.D. degrees in economics and its allied subjects. After acquiring the new status, the syllabi of the courses offered at the Institute were thoroughly revised on the basis of the recommendations of a committee constituted for the purpose. Courses in the M.A. programmes of the Institute are being regularly updated on the recommendations of the Board of Studies and Academic Council. At present the Institute offers three post-graduate programmes, viz., M.Sc. (Economics), M.Sc. (Financial Economics) and M.Sc. (Agribusiness Economics). From the current academic year (2014-15), the Institute has converted its M.A. programmes to M.Sc. programmes, comprising an increased number of papers with upgraded syllabus, and focus on quantitative techniques and their applications.

Training

In April 1989, the University Grants Commission selected the Institute and extended assistance to it for conducting refresher courses in economics for in-service university and college teachers from the western region of the country. In 1994, a year after the grant of Deemed to be University status to the Institute, the UGC extended the catchment area of the Institute for its refresher courses to the entire country. Since the inception of this scheme by the UGC, the Institute had conducted several UGC-sponsored refresher courses for university and college teachers as well as workshops for government servants and others from across the country from time to time.

Research Centres at the Institute

The Institute has three research centres established by the Central Government and University Grants Commission.

Agro-Economic Research Centre (AERC)

The Agro-Economic Research Centre (AERC), Pune, was established by the Union Ministry of Food and Agriculture in 1954. It has been an integral part of the Institute since its inception. In 1962, on the basis of the quality and extent of work done by GIPE, its professional reputation, its contribution to research in agricultural economics and its potential for further development, the University Grants Commission selected it as a Centre of Advanced Study in Agricultural Economics. Two years later the field of study of the Centre was expanded and it was re-designated as the Centre for Advanced Study in Economics. The Centre also conducts studies allotted to the Institute by various agencies such as the Government of Maharashtra, NABARD and Planning Commission, Government of India. The AERC has completed about 160 studies since its inception. Its activities cover Farm Business Surveys, Studies related to Irrigation, Watershed Management, Rural Electrification, Village Surveys, Rural Credit, Agricultural Tenancy, Co-operation, Droughts and Famines, Crop Insurance, Agricultural Marketing, Agricultural Exports, Poverty Alleviation, etc. A large number of these studies have made significant contributions to the field of agricultural economics and agricultural development of the country. These studies have been widely recognised by policy-makers and academicians and serve as benchmarks of excellence in their respective fields.

Population Research Centre (PRC)

'Population Studies' at the Institute predate the formulation of population policy, establishment of the family planning programme by the Government of India and founding of Population Research Centres. The Institute has played a pioneering role in conducting demographic surveys in India. A demographic survey of Kolhapur city in 1945 made a lasting contribution towards evolving and establishing a standardised methodology of demographic surveys. A research centre in demography was set up at the Institute in 1949. This was the first of its kind in the country. The Union Ministry of Health and Family Welfare had given grants to the Institute for conducting specific studies during 1954-57. In 1964, the Ministry decided to strengthen and extend the research work on population by establishing a Demographic Research Centre as a part of the Institute. In 1978-79, in pursuance of the recommendations of the Demography Advisory Committee, the Centre was re-designated as a Population Research Centre for the State of Maharashtra. It has earned the distinction of being included in the category of 'fully developed' centres according to the norms of the Ministry of Health and Family Welfare. In the fifties, when no information on demographic issues was available, the

Centre started its work by conducting demographic surveys and thus contributed in a major way to the area of survey methodology. After the launch of the family planning programme at the official level, the Centre contributed by actively participating in the implementation of the sterilisation programme and by undertaking communication-cum-action studies. Evaluation of the after-effects of vasectomy camps and acceptance of the loop as an IUD gave valuable inputs about the methods of family planning.

Various dimensions of the family planning programme at its different stages, starting with its communication methods and including several of its other aspects such as compulsion during the emergency, adoption of spacing methods, maternal and child health, withdrawal of the targets, RCH approach of the programme, RTI/STI, client satisfaction and unwanted pregnancies have been studied by the Centre. The work of NGOs in the field of family welfare has also been evaluated. In recent years, evaluation of the sterilisation bed reservation scheme, functioning of family welfare training institutions, ultrasound sonography centres and urban health posts have been carried out. In the area of data collection on a wide scale, the Institute has independently carried out or participated in major surveys in 1980s and 1990s (NFMS, 1980; NFHS, 1992-93; and RCH Baseline Survey, 1998). Apart from evaluative and fact-finding surveys, many analytical studies are carried out. Recently, a study on the cost of health care in public hospitals in Maharashtra was completed. The Centre has just completed two rounds of a World Bank-sponsored research study on the quality of health care (client and provider satisfaction) in India/Maharashtra. The demography of India's tribal population is another recently completed research project. Currently, the Centre is involved in activities related to the strengthening of the Health Management Information System (HMIS), a new initiative of the Ministry to collect the district and facility level health data on a monthly basis.

Centre for the Study of Social Exclusion and Inclusive Policy (CSSE and IP): CSSE and IP is a multi-disciplinary research centre established by the UGC in the year 2008 (as part of the Eleventh Plan) to carry out research and teaching in the areas of social exclusion, discrimination and inclusive policy. Its key objective is to conceptualise and define problems related to discrimination, exclusion and inclusion based on caste, ethnicity and religion. It focuses on developing an understanding of the nature and dynamics of exclusion and discrimination at both theoretical and empirical levels.

Besides these three centres, the Institute also houses four prestigious Chair Professorships, viz.,

1. RBI Chair Professor of Finance whose unit conducts research and teaching in Monetary and Financial Economics (funded by Reserve Bank of India).
2. D.R. Gadgil Chair Professor of Planning and Development (funded by Planning Commission of India).
3. Ford Foundation Chair Professor of International Economics (funded by Ford Foundation).
4. Kamalnayan Bajaj Chair Professor of Industrial Economics (funded by Kamalnayan Bajaj Foundation).

Professor John Caldwell Memorial Lecture

Professor John Charles (Jack) Caldwell died on 12th March 2016 at the age of 87 in Canberra. He was associated with the Department of Demography of Australian National University (ANU) for many decades. Caldwell's seminal work included documentation of the role of mother's education in fertility limitation and child mortality decline and the role of circumcision in inhibiting the spread of HIV/AIDS in Africa. He is known for his "wealth flows" theory, which relates demographic transition theory to changes in inter-generational transfers within the family. A 2009 survey of nearly 1,000 demographers worldwide, named Jack Caldwell the most influential researcher of all time in the field of demography. In 1985, the Population Association of America (PAA) presented him with its highest prize, the Irene B. Taeuber Award for excellence in demographic research. In 1994, he began an elected four-year term as President of the International Union for the Scientific Study of Population (IUSSP), and, in 2004, he was presented with the prestigious United Nations Population Award. These are the three highest international honours in the field of demography, and no other person has won all three of these awards. He has encouraged and mentored many young scholars from India, and good number of them received their Ph.D.s from ANU under his able guidance. His anthropological demographic work on south India, particularly on marriage, fertility and contraception, received lot of research attention.

His students, colleagues and friends have approached the Indian Association for Social Sciences and Health (IASSH) to institute a memorial lecture in his honour. IASSH is happy to announce the lecture series in memory of the most famous demographer of our times. The First Prof. John Caldwell Memorial Lecture will be held during the 14th Annual Conference of IASSH on 24th September, 2016 at 6.00 pm at Gokhale Institute of Politics and Economics (Deemed University), Pune. Distinguished Demographer Prof. K. Srinivasan (former Director of IIPS, Mumbai) will deliver the First Prof. John Caldwell Memorial Lecture on the theme "Malnutrition and mortality among children in India: Need for a revisit to ICDS Program". You are most welcome.

Dr. K.E. Vaidyanathan Memorial Lecture

Dr. K.E. Vaidyanathan, a distinguished demographer and former President of IASSH, passed away on 4th June, 2014. He was a faculty at the International Institute for Population Sciences, Mumbai during 1968-1971. In 1971, he joined the Institute of Rural Health and Family Planning, Gandhigram, as Head of the Department of Population Studies and also served as its acting Director for a short period. Later, he joined the UN system as a Demographer in Cairo Demographic Centre, which is the regional centre for Africa and the Middle-East. In 1976 he moved to Syria as a UN Adviser to help establish the Centre for Population Studies and Research and to advise the Planning Commission of Syria. This was followed by a posting in Kampala, Uganda, to serve as a faculty in the Institute of Statistics and Applied Economics in Makarere University, Kampala. In 1979, he became the UNESCO Regional Adviser for Population Education in the Arab region, and, in 1982, he moved to ILO as the Regional Expert for Household Surveys under the National Household Survey Capability Programme (NHSCP) in the Arab region. Later, during 1992-96, he served as the Chief Technical Adviser for the Sudan Population Census of 1993, which was acclaimed as the most successful Census ever held in that vast and complex country. In 2001, he helped plan and implement the Living Standards Measurement Survey (LSMS) in Bosnia-Herzegovina and, in 2005, he went back to Sudan to plan the 2007 Population Census. He was the President of the Indian Association for Social Sciences and Health (IASSH) from 2007 to 2011, and was mainly responsible for the growth and expansion of the Association to its present form. In his demise, we lost an outstanding scholar, an excellent teacher, an expert health and census professional, and above all, a fine human being.

Considering his significant contributions, IASSH instituted a memorial lecture in honour of Dr. K.E. Vaidyanathan from 2014 conference onwards. The Third Prof. K.E. Vaidyanathan Memorial Lecture will be delivered by well known expert on Gender and Reproductive Health, Dr. Shireen Jejeebhoy (formerly with Population Council) on the theme: "Unmet need for reproductive health services for newly married adolescent and young women in India", on 23rd September, 2016 at Gokhale Institute of Politics and Economics, Pune.

Seventh Pre-Conference Workshop
on
'Approaches to Social Science Research'
September 20–22, 2016 at Pune

In order to train young research scholars, IASSH has initiated the Pre-Conference Workshop on "Approaches to Social Science Research" from 2010 onwards. Important aspects of social science research will be discussed in this workshop and suggestions will be given to M.Phil./ Ph.D. scholars in designing, analysing and executing their study. Every year about thirty research scholars are registering for this workshop and consider this as an appropriate platform to fine tune the methodological aspects of their M.Phil./Ph.D. work.

Topics Covered in the Pre-Conference Workshop:

Introduction to Social Science Research, Selection of Research Problem, Approaches in Quantitative and Qualitative Research, Methods of Collection of Qualitative and Quantitative Data, Development of Tools, Quantitative Data Analysis using SPSS, Qualitative Data Analysis using Atlas-ti, Writing Research Proposal, Thesis Writing, Presentation Skills, Ethics in Social Research.

Resource Persons for this year's Workshop:

The resource persons include Prof. C.P. Prakasam, Prof. S. Siva Raju, Prof. T.V. Sekher, Prof. D.P. Singh, Prof. N. Audinarayana, Prof. T. Rajaratnam, Prof. Rajas Parchure, Dr. Jayanti Kajale, Dr. Pradeep Apte, Dr. Rama Kawade, Dr .Suddhasil Siddhanta, Prof. Ram Gambir, Dr. Shantanu Ozarkar, Dr. Prashant Bansode and Dr. Anjali Radkar.

List of Participants:

Helga Thomas
Partheeban R.
Shweta Marathe
Arvind Jadhav
Prashika Kurlikar
Ayan Rudra
Samarul Islam
Surbhi Shrivastava
Pathan Jaheb Khan
Jyoti Deepak Londhe
Raghavendra Hajagolkar
Savani Karade
Ashwini Devane-Padalkar
Dr. K. Tamilselvi
Sandeep Sharma
Apilang Apum
Junaid Khan
Mithlesh Chourase
Vinod Shende
Dr. Dhanashri Mahajan
Sushila Kawade
Sakshi
Anupama Chidgopkar

CSR and Health

JSW Foundation, an integral part of the JSW Group, is the social development division of the Group. It is an independent institution and is governed by Board of Trustees who is drawn from the senior management of the Group. JSW is committed to enhance the quality of life of communities around its operations. The Company is conscious that the local community is not homogenous, so varying layers of social deprivation and marginalized needs to be identified, understood and valued from an anthropological and sociological perspective.

Vision

Empowered communities with sustainable livelihoods.

Mission

Outreach of government programs in health and employment generation through gap filling support. Moving our townships and communities towards carbon efficient management systems. In-situ conservation of at least one major monument at project locations and promote national cooperation for conservation of all monuments. Collaborative earth-care initiatives. Need-based social development interventions in our mining locations.

Areas of Operation

LIVELIHOOD

Vocational training centres are run to ensure that local youth are employable in technical and non technical skills Rural women and girls are trained in operating heavy earth moving vehicles- a field traditionally occupied by men SHGs are supported through collateral credit programs.

EDUCATION

Operates 'Tamanna' a school for specially abled children Converting Anganwadis and preschool spaces into effective learning spaces Collaborating with the ICDS to develop low cost and effective learning material Ensuring computer aided education and libraries across locations. Remedial education and career guidance classes across locations.

HEALTHCARE

Ensuring better sanitation in all our locations Collaborating with ICDS to develop comprehensive programs to tackle malnutrition. Institutional up gradation & program inputs to ensure 100% institutional delivery Health camps, checkups & financial assistance.

ENVIRONMENT

Establishing garbage collection and recycling units Promoting the model village programs which advocates for sustainable forms of energy. Supporting the Earth Care Awards Published books in collaboration with TERI on climate change. In the Plenary Session, there will be presentations by prominent experts who would relate the important role of Corporate Social Responsibility in the spheres of Health and development.

Papers Selected for the 14th Annual Conference, 2016

PAPERS SELECTED FOR ORAL PRESENTATION

Sr. No.	Title	Author(s)
1	Open Defecation and Health in Rural India: A Case of Gujarat	Amrita Ghatak
2	Missing Girls in India and Major States	Ajit Yadav and Priyanka Yadav
3	Correlating Health and Environment: Urban Scenario	Ambika Dutta and Debasish Gupta
4	Factors Influencing Maternal Health Indicators among Tribal Population in Maharashtra with Special Focus on Five High Priority Districts	Ajeesh Sebastian and Dr. Shahina Begum
5	Sustainable Social Development through Participation in Governance: A Special Reference to Women Representatives of Grama Panchayats in Kerala	Amrutha K.P.N.
6	Clinical Profile of Attempted Suicide in Elderly	Dr. Anand P. Ambali
7	Social and Economic Determinants of Demand for Mental Health	Anil Vartak and Prof. R. Nagarajan
8	Do the Inter-State Migrants Count? A Review of Initiatives by State and Civil Society Organizations in India	Anns Issac
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Abstracts

ORAL AND POSTER PRESENTATIONS

Open Defecation and Health in Rural India: A Case of Gujarat

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The Census 2011 reveals that 67% of rural households defecate in open spaces. India accounts for 60% of the world's open defecation. It is important to note that open defecation is more common in rural areas wherein almost 70% of Indian population lives. In fact, 89% of households without a toilet, in the 2011 Census, were in the rural areas. The toll of water and excreta-related diseases are found to be high in many parts of the globe. Using data from both primary and secondary sources, this paper will make an attempt to: a) understand the usage of toilets and status of open defecation in villages in Gujarat and India; b) ascertain the relationship between usage of toilets and excreta-related diseases in rural India; and c) estimate the burden of water and excreta-related diseases in villages in India. Unit-level data on drinking water, sanitation, hygiene and housing conditions from National Sample Survey (NSS) 69th round (Schedule No. 1.2, 2012) will be used to understand the usage of toilets/latrine in rural areas in India. Further, a set of information collected through a primary survey in 7 villages of Gujarat during April-May, 2016, will also be used in order to have an in-depth understanding of factors pertinent to the use of toilets in villages. The NSS unit-level data on health and morbidity (71st round, Schedule no. 25.0; 2014) will be used to examine the economic burden of diseases that are related to water and excreta.

Factors Influencing Maternal Health Indicators among Tribal Population in Maharashtra with Special Focus on Five High Priority Districts

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Introduction: Despite of NRHM/NHM programs some districts of Maharashtra showing poor composite index.

Objective: To find out the contextual factors influencing maternal health indicators among tribal population in Maharashtra with special focus on five high priority districts.

Methods: The Five High Priority tribal Districts (HPDs) in Maharashtra, namely, Dhule, Gadchiroli, Jalgaon, Nanded and Nadurbar were considered for analysis. Various secondary data sources were

used to examine the different factors such as district profile, socio-economic status of tribal population availability and accessibility of health facilities, which may influence the maternal health indicators.

Results: It was found that district profile, socio-economic status of tribal population, and availability and accessibility of health facilities influencing the maternal health Indicators.

Conclusion: Coordinated efforts are required to improve the maternal health in these districts with special focus on the dynamism of behavioural and socio-economic determinants interact within the present state of tribal mothers' health.

Missing Girls in India and Major States: A Decomposition Analysis

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Sex selective abortion is high in India due to many prenatal factors which directly influence the Child Sex-Ratio, persisting son preference, easy access to ultrasound technology and abortion facility (Sex selective abortion), and low fertility preferences among couples. The post-natal factors directly affecting the child sex ratio is excess female child deaths. In this study, a decomposition analysis is applied to assess the effect of pre- and post-natal factors on changing child sex ratio over the last decade. Before the CSR is calculated, age-sex population is adjusted by omission rate as given in the post enumeration survey. In India, 4.04 lakh girls, on an average, were missing at birth in 2011, Census 2011. In 2001, 2.60 lakh girls, on an average, were missing at birth. In the period between 2001 and 2011, UP, Bihar, Rajasthan and Maharashtra, states in India, together contributed more than 65% of girls missing at birth annually. Punjab and Haryana are having the highest proportion of female births missing out of total female births occurred in 2001 and 2011.

Correlating Health and Environment: Urban Scenario

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Environment plays an important role holistically in understanding urban way life and urbanization that have brought profound impact on people's lifestyle, living conditions and health status. The study on health, frames how characteristics of the urban environment, that is, both natural and social environment, correlates to health and the population holistically. The objective of this paper is to explore the relationship between environment and health in the urban scenario. This paper also attempts to shed light over how environment plays an important role in the changing pattern of choice in health care system and alternative medicine preferences among the different strata of the urban population. At one end, urban life witnesses increase in slums due to overpopulation, poverty, migration consisting of lower and lower middle class. On the other side, it portrays the picture of a metro, cosmopolitan city with higher and middle class groups. These two

key dimensions of urban environment affect health, health-oriented behaviour and wellbeing differently. The slum dwellers along with increase in slums, unhygienic conditions, water problems, poverty and overcrowd have given rise to diseases of public health concern. Whereas, the higher and middle class city dwellers are witnessing more diabetics, obesity, heart attack, cancer, mental illness and depression mainly as an consequence of urban lifestyle. Methodology-wise, this paper aims to build up the findings and results based on the primary data collection and empirical study from slums and health sector of Aurangabad city along with secondary sources for better analytical understanding.

Sustainable Social Development through Participation in Governance: A Special Reference to Women Representatives of Grama Panchayats in Kerala

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Development becomes sustainable when women in a society lead the way in new practices combining environmental, economic and social goals. Development without integrating gender equality is not sustainable. Women's collective action, power for decision making and awareness about social issues are very important in improving the productivity and efficiency level of women which enhance sustainable growth. 73rd and 74th amendments of the constitution of India, which were amended in 1992, have created a better political space to women in local governance ensuring 1/3rd seats in Pachayat Raj institutions. And in the state of Kerala the reservation for women is 1/2 of the total seats which ensures equality for representation in the local administration. Considerable political participation of women is expected to improve their social life and status. The present paper deals with the factors which influence social empowerment of the elected women representatives in the rural administrative bodies of Kerala. The study was conducted among the 219 elected women representatives of Gramapanchayaths in Kerala, using a structured interview schedule. Based on the study measuring the personal autonomy, power of decision making in family and social competence of elected women representatives, it has been found that the social life and status of elected women varies according to age, number of times elected, years of living in the present place, religion, caste, family income, family size, highest level of education in the family.

Clinical Profile of Attempted Suicide in Elderly

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Introduction: The senior citizens in India are considered happiest as they are well-integrated and respected in the family. The children take responsibility for their care and the business. However, the

changing trends of family life, elder abuse, being lonely, depression and lack of social support make the seniors attempt to end their lives. The elderly in India constitute 8% of all suicides in the year 2005.

Materials and Methods: The elderly admitted to hospitals for having attempted suicide from the year January 2012 to May 2016 are included in the study. A prospective clinical profile of the pattern of attempt suicide, risk factors, access to first-aid, co-morbid conditions, complications and outcome are analysed. A total of fifty elderly patients with attempt suicide are admitted during the study period.

Results: The oldest person was ninety years old. Majority of the elderly (86%) were in the age group of 60 to 74 years. Insecticide compound was used by 70% of elderly to end their lives. Depression, abuse and anxiety were common precipitating factors. Complications like respiratory failure were seen in 20% of the patients, while the mortality rate was 6% in this study.

Conclusion: The elderly attempting life is rising in India too. As the insecticides are easily available, it is the preferred mode to end life. The access to first-aid needs to be addressed. Counselling services for the elderly, who are depressed, staying alone and are abused, should be considered.

Social and Economic Determinants of Demand for Mental Health

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World Health Organization says 'there is no health without mental health'. However, this has turned out to be rhetoric. Mental health does not receive the priority that it deserves; it is neglected at the policy and individual level. Most of the studies and policy suggestions focus on expanding or scaling up of.

However, simply scaling up of services is not adequate. There is a need to understand demand side factors and its determinants. This paper gives results of a study that was undertaken to explore delay in demand for mental health services of patients from Yerwada Mental Hospital (YMH), Pune. Information was collected from 249 caregivers of patients with mental illness from YMH from June 2014 to September 2014. The study finds that treatment delay (TD) is significant and recognition delay (RD) is the most important component of it. This study finds that mean RD is 36 months. When this delay was classified into sub-groups of each of the variables, it was found that mean RD changes with religion, caste, gender, age at onset of symptoms, current age, relation with patient, place of residence, etc. This study observes considerable inequality in mean RD within these variables. The inequality was further tested. The study concludes that demand for mental health services is significantly affected by social determinants. These determinants should be specifically addressed along with expanding services for mental health.

Do the Inter-State Migrants Count? A Review of Initiatives by State and Civil Society Organizations in India

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Background: Internal migration for labour in the informal sector represents an important livelihood strategy for many in the less developed regions of India. The volume of migration increased in the recent decade owing to the destabilisation of the rural economy. Their marginalisation is the product of a complex interplay of factors; apart from the socio-economic divide, it is shaped by the regulatory and administrative barriers. This necessitates a review of government policies and programs, as well as initiatives by other interest groups for the welfare of inter-state migrants.

Objective: To examine the migrant-specific initiatives by state and civil society organizations in India

Methods: The paper relied on the review of specific policies, programs and schemes for inter-state migrants in India. The documents concerning migrant-specific initiatives were sourced through an online search, and were analysed for content and context.

Findings: Other than a few labour laws that have provisions for migrant workers, there exists limited policy response to the particular issues of migrants. States like Kerala introduced state-specific programs for inter-state migrants. Trade unions and political parties seldom included the challenges of migrant workers in their agenda. There is emphasising on migrant's welfare by some non-governmental organisations. However, their donor-driven initiatives focused mostly on the sexual health of the migrants. Further, many efforts concentrated on the migrant-receiving regions with practically zero coordination with the source regions.

Conclusion: The responses of the state and civil society organisations are weak as the migrants are largely invisible in their data set.

Gender Differences in Smokeless Tobacco Use in India and Bangladesh: A Comparative Analysis Using Global Adult Tobacco Survey, 2009-10

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The users of smokeless tobacco (SLT) in South Asia are around 250 million. Although males are globally greater smokers of tobacco, SLT reports almost equal prevalence among both the genders. The present study aims to examine the prevalence and potential factors associated with SLT use between genders in India and Bangladesh. The Global Adult Tobacco Survey, 2009-10, is used for the analysis.

Test of proportions is used to investigate that the difference in prevalence is statistically significant. Multivariate logistic analysis is carried out to find out the log of odds of SLT use between males and females in India and Bangladesh. The results suggest that Indian males and Bangladeshi females have higher prevalence of SLT use in their respective countries. Females, in lower age categories, have higher prevalence of SLT use in India compared to Bangladeshi women. However, the pattern reverses as higher aged women are observed in both the countries. Similar pattern is observed among males as well. The prevalence among Indian men is more who have knowledge about SLT's harmful effects than Bangladeshi males. The odds of smokeless tobacco consumption are observed to generally increase with age, poverty and lower educational level in both the genders across India and Bangladesh. The findings highlight the importance of gender difference in consumption of smokeless tobacco products and provide deeper insights into the prevalence and determinants of smokeless tobacco use across India and Bangladesh.

How Healthy We Are? Narratives of Experiential Health from a Village of Western Nepal

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It has become a customary that we cite various development reports, which generally show remarkable progress in some of the health indicators, to signify the higher quality of life achieved over the years. The human development data sets, for instance, present impressive progress in terms of decreased mortality, increased life expectancy, higher literacy and educational attainment which is synonymous to higher standard of living. With the amazing success of medical science and advancement in therapies and surgeries (such as open-heart surgeries, transplant of livers and kidneys and other such landmarks), and prevention and control over some of the dangerous diseases (such as polio, malaria, leprosy, tuberculosis, HIV, SASH, Ebola, bird flue and dengue to name a few), we are bound to believe that we have achieved much and there is no question whether the overall health condition has been worsened in the last few decades. The real life experience of local people, however, challenge this fact and compels us to reflect on 'are we really healthier than before?'. Drawing from a qualitative study conducted in a village of western Nepal, this paper aims to present people's narratives and deepen our understanding of how people in a village have experienced their health. The paper recognizes the deteriorating health experience of the people, which is primarily resulted from a loss of community and family health traditions. The paper suggests further explorations of the changing perceptions of health in connection with macro changes that has been taking place in recent times.

Indigenous Medicine & Methodology in the Management of Diabetes Mellitus

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Diabetes is termed as silent killer and is a chronic metabolic disorder that arises when the pancreas does not produce enough insulin or when the body cannot effectively use the insulin produced. The resistance of Insulin and occurrence of side effects from prolonged administration of allopathic drugs have observed thus there is a need to search safe and effective alternatives. In the present study an attempt has been made to know the effect of an Ayurvedic drug (Varadi Kwatha) with diet and lifestyle in reduction of level of diabetes on the basis of case-control study. Thirty patients have been observed for a period of 8 weeks under the medication of Ayurvedic drug with diet and lifestyle (Group-A) and other 24 patients with only Ayurvedic drug (Group-B). Bivariate analysis and paired t-test have been used to know the changes occurred in different parameters, before and after treatment. It has been observed that in biochemical parameters of Group-A, the FBS was 164.34±54.11 before treatment and 124.81±26.22 after treatment (24 per cent change) shows highly significant improvement, however, PPBS 247.39±56.52 before treatment and 198.34±38.33 after treatment (20 per cent change) also shows highly significant improvement. However, in Group-B, there was only 16 per cent change observed in the FBS after the treatment and only 13 per cent change in PPBS observed after treatment was given. It is clearly reveals that the Ayurvedic drug works significantly to control the level of blood sugar, in presence of controlled diet and lifestyle.

Reproductive Health of Women: A Case Study of Tea Garden Communities of Margherita, a Tea Town of Assam

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The concept of reproductive health, according to UNO, is a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity, in all matters relating to the reproductive system and to its functions and processes (UN, 1994). Assam, located in the tropical altitudes (24.3N and 28N) and eastern longitudes (89.5E and 96.1E), is the most populous state in north east India with a population of 3,11,69,272. Margherita is located in the North eastern end of the Brahmaputra valley of Assam, situated on the bank of Buridehing at the foot of the Patkai range. Margherita is the centre of tea gardens where large tea estates are flourishing. Generally, the tea gardens developed by planters are the main theme of the study, where sizeable female workers are engaged in plucking leaves.

The objectives of the study are as follows:

1. To know the perception of the women about the use of contraceptives.

2. To know their experience about abortion and infertility.
3. To observe the child-rearing practices among the Tea-garden communities, which comprise Munda, Kharia and Oraon.
4. To look into the common gynaecological problems including menstruation cycle, the women generally suffer.

One hundred and fifty married women in the age group of 18-45 were taken as respondents for the study from the three tea estates around Margherita town. It is a micro study and a very simple methodology is adopted. It is basically an exploratory research design. Both primary and secondary data are used in this study. The study findings would be much more enlightening.

Marital Communication and Partner Violence in Slum Community of Mumbai

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Introduction: Marital communication is an important factor in reducing spousal violence. Good communication between wife and husband leads to harmonious life. The objective of the study is to understand marital communication and partner violence.

Material and Method: The community survey was carried out in Tunga and Kajupada, health post areas of Municipal Corporation of Greater Mumbai. Data for the study was obtained from 1,136 women, age between 18 and 39, currently married, staying with husband and having at least one child. Information on socio-demographic characteristics, partner violence (PV) and marital communication were collected using structured interview schedule during 2012-13.

Results: Study results indicate that majority of the women were between the age of 25 and 29 years (38.7%), Hindu (65.3%) and married for less than five years (40%). About 21 per cent women ever experienced partner violence. Women, who experienced violence by husband, perceived that their husbands never discussed about sex freely with them (14%) and about 20 per cent women could not discuss about sex freely with their husbands. As compared to women with PV (67.9%), significantly more number of women with no PV (81.2%) perceived that their husbands listen to their suggestions. Similarly, significantly more percentage of women with no PV (82.2%) than women with PV (68.7%) perceived that their husbands discuss their economic difficulties with them.

Conclusion: Study indicates that there exists partner violence in the slum community which influenced poor marital communication.

Does Continuum of Care for Maternal Health Service Uutilization Matters in Contraceptive Use in Uttar Pradesh

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Background: Continuum of Care (CoC) throughout antenatal care, delivery and post-natal care has become a key program strategy for improving the health of mothers and newborns. This paper investigates the CoC for maternal health service utilization and its role in modern contraceptive use in rural Uttar Pradesh, India.

Methods and Findings: A cross sectional District Level Household and Facility Survey was administered in 2007-08 and covered 76,147 currently married women (CMW) aged 15-44 years through multi-stage probability sampling in all 75 administrative districts of Uttar Pradesh. Results show that 12% of CMW had the full range of services for CoC. About 24% of CMW were using modern family planning methods among those who received preceding CoC for maternal health. Multivariate result shows that the modern methods of family planning were more likely to be used by CMW, who had CoC for maternal health (Yes ANC and Yes INSD and Yes PNC), had partial CoC (Yes ANC and No INSD and Yes PNC), had another partial CoC (No ANC and Yes INSD and Yes PNC) compared who did not received (No ANC and No INSD and No PNC) any service of CoC.

Conclusion: The CoC for maternal health is low and it has more effective in modern contraceptive use in the rural Uttar Pradesh. Efforts should focus on increasing contraceptive use and overcoming the known obstacles to CoC.

Socio-economic and Demographic Determinants Influencing Women's Empowerment and Its Influence on Partner Violence in a Slum Community of Mumbai

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Women's empowerment is the process by which unequal power relations are transformed and women gain greater equality with men. Empowered women have better socio-economic status than low empowered women and perpetrate partner violence. An attempt is made here to examine the socio-economic and demographic variables by women's empowerment status among currently married women in two slum communities and the prevalence of partner violence among them. To achieve the objective, data were collected from a survey conducted by authors on a sample of 1,136 married women having at least one child, unmet need for family planning living in slum community of Mumbai. Women empowerment index has been calculated (low, medium or high) by considering "women's participation in decision-making power, women's freedom of movement, and women freedom from threat". Chi-square statistic

has been calculated by considering decision-making power, freedom of movement and from threat separately, with background characteristics of the slum women and exposed to partner violence. Further correlation between women empowerment index and women exposed to partner violence has been calculated. Results revealed that there is a significant association between women empowerment index and age group of women, religion, husband's age, husband's occupation. Women who had experienced violence by husband found to be "low empowered". Further, a negative correlation has been observed between women empowerment index and violence by husband, indicating more empowered women are less exposed to partner violence in the slums in Mumbai.

Pathways to Care in Tuberculosis: Health Seeking Behaviour in Urban Slums of Delhi

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India's disease, burden for communicable and non-communicable diseases, is a matter of global concern. Every disease presents challenges to the health systems, which are multi-pronged – some are health systems related and some are patient related. Either ways, these lead to delay in seeking care and, thus, hinder achieving the burgeoning gaps for MDGs. Care pathways serve as useful and evidence-based tools to reduce variations in clinical practice and improve quality and outcomes of healthcare interventions. Care pathways are structured multi-disciplinary care plans which detail essential steps in the care of patients with specific clinical problems. India ranks eighth among the world's 22 high burden TB countries, with approximately 1.2 million new cases yearly, of which 6,25,000 are smear positive. Adherence to TB treatment is particularly important for TB control programmes, as non-adherence can contribute to the ongoing spread of disease and the emergence of drug resistant TB in the community. A study of medical pluralism among patients seeking treatment for TB is complex. TB treatment requires taking several drugs together for at least 6-8 months; adverse effects do occur and patients will usually feel better after taking their medications for a few weeks. Some patients stop treatment because they believe their TB has been cured after symptoms have abated. In addition to the nature of treatment, barriers to TB treatment adherence include the health care system, the provider and patient factors.

Hidden Crisis in Health Infrastructure: Evidence from Karnataka

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Contrary to the significant health performance indicators (IMR, CDR, CBR and Life expectancy) Karnataka is facing lot of agitation towards health infrastructure. The overwhelming focus on

quantity of health care has been ignored, which creates a massive problem in the quality of health care delivery. In this context, this study focuses on health infrastructure in Karnataka. The main objective of the study is to analyse the existing health infrastructure in Karnataka and suggest measures to improve the quality of health care delivery. Double log simple regression model is used to estimate elasticity coefficients of health indicators with respect to health infrastructure. Results confirm that the availability of manpower should be increased proportionately to that of population. The implication from the study reveals the hidden crisis about health infrastructure and to bring drastic changes in improving the health system. An integrated and comprehensive framework can solve the existing problem where there exists district-wise difference of requirements in infrastructure can be determined on the basis of population. Such a decentralized system would provide for better administration of local health problems. This may result in saving public money in more cost-effective manner at the micro-level.

Prevalence and Correlates of Maternal Anaemia in India: Analysis of a Nationally Representative Cross-Sectional Survey, 2012-13

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Background: Anaemia is the common problem among Indian women, particularly during pregnancy. According to the reports of W.H.O. indicated that between one-third to two-third (almost half on average), pregnant women suffering from anaemia in developing countries and more than two-third Indian women were suffering from anaemia.

Aim: The present study aimed to explore the prevalence and differentials of anaemia and identify the main correlates of anaemia among pregnant women in India.

Methods: Using the nationally representative cross-sectional data from the fourth round of District Level Household Survey (DLHS-4, 2012-13). The outcome variables included in the study was anaemia. Bivariate analyses including Chi-square tests to determine the prevalence of anaemia and logistical models to understand the determinants of anaemia were applied.

Findings: The findings of this study indicate that the prevalence of anaemia was observed high (62.6%) among pregnant women in India and the mean haemoglobin level was 10.3 ± 2.3. Prevalence of anaemia was higher among younger women, uneducated women and women belong to poorest wealth quintile. However, this study found that there is differential in anaemia across key selected individual, household and community characteristics of pregnant women in India.

Conclusion: This study concludes that the prevalence of anaemia is very high in India among pregnant women. Women's age at the time of pregnancy, women's education, number of household member in the family, economic status, type of cooking fuel and type of residence are the major determinants that contribute to the problem of anaemia.

Management and Implementation of Mukhya Mantri Nishulk Dava Yojna (MNDY) in a District Hospital, Rajasthan: Perspectives, Issues and Challenges

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The 'Mukhya Mantri Nishulk DavaYojna' (MNDY) has been started across the state since 2nd October, 2011, in order to distribute most commonly used drugs free of cost to all patients visiting Government Hospitals. To run the scheme, an advanced inventory management has been developed by the name of e-Aushadhi, and implemented across all Public Health facilities. Trained human resources and computer with printers and internet connectivity are provided. In this study, 183 patients, staff responsible for implementation of the scheme and specialists were interviewed. The study revealed that patients and Doctors were highly satisfied with the functioning of the scheme and they are getting majority of medicines prescribed by the Doctors. The scheme has been able to reduce out-of-pocket expenditure on medicines and increased hospital attendance manifold.

Population Ageing: It's Time to be Serious about Long-term Care of Seniors!

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India has over 100 million older persons (Census 2011), which is projected to triple by 2050 (over 323 million). The growing cohort of elderly especially the 'oldest-old', has implications for the health and social systems, as they have greater demand for long-term care (social and healthcare). Given the changing social cultural context, withering inter-generational bonding and filial piety in India, the State will have to play a greater role in caring for the growing elderly population. This paper examines the extent of chronic morbidity, limitations in ADL and IADL, disability and dementia among elderly in India viz-à-vis status of long-term care availability and unmet needs in terms of both health and social-care, by presenting a situational analysis of health and care needs of elderly by analyzing NSSO (2014), LASI and SAGE data. The findings suggest a rapid increase in chronic morbidity, disability among elderly especially 80 years and above, dependence on care givers for undertaking IADL and ADL at one end and lag in addressing these needs for long-term care by adequate policy and programmatic measures. This clearly suggests that the increasing unmet need of long-term care for seniors in India and increasing burden of informal care giving, which needs immediate policy and programmatic interventions. Innovative community-based models for long-term care entail a possible and sustainable solution to address upcoming LTC needs of elderly.

Traditional Medicine and Contemporary Debates

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The human body is much more than an anatomical structure and the process of cure also has wider psychosocial dimensions that can be explained by biomedicine alone. The traditional medicine has often been termed as placebo, but these alternate systems of medicine have done wonders, which have been documented from time to time. This particular paper aims to address some contemporary debates in traditional medicine. The methodology adopted for this paper is narrative review. First, it addresses contrasting approaches towards diagnosis and treatment in Ayurveda as compared to western medicine. Second, it addresses the difference in payment modalities between Siddha and Biomedicine. Third, it addresses medical communalism which recognises Unani as Islamic system of medicine and Ayurveda as its Hindu counterpart. Fourth, it addresses the importance of main-streaming Dai training. Finally, the paper addresses commercialization of traditional medicine in the international market. The paper concludes that promotion of traditional medicine is very essential for harnessing its benefits. While Ayurveda has a holistic philosophy towards diagnosis and treatment; Siddha philosophy is to receive payment only after therapeutic validation of treatment. The traditional Dais still hold important place for psychosocial support during childbirth. There is also a need to address medical communalism that deprives many people of benefits of Unani medicine and to de-commercialize the traditional medicines, so that they remain affordable to common people from lower and middle class.

Health Expenditure and Health Insurance: An Econometric Analysis

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Good health is an inevitable resource for an individual for his survival and is directly related to increase the productivity of the country. There are more recent research evidences that show the effect of illness on poverty. Even relatively small expenditure on health care can be disastrous and push the people to the verge of poverty? Deficient government health care expenditure and inadequate public heath infrastructure force the people to shift from using government healthcare facilities to private healthcare facilities. In India, the public financing for healthcare is less than 1 per cent of the world's total health expenditure and the public health expenditure as a percentage of GDP is only 4 per cent. The households meet almost 70 per cent of their health expenses out of their pockets. This shows the necessity for increased public health expenditure and wide health insurance coverage.

Objectives of the Study:

1. To estimate the trend of health indicators for India for the period from 1971 to 2015.
2. To examine the relationship between healthcare expenditure and health outcomes.

3. To analyse the status of health insurance and its impact in India.

Data relating to healthcare indicators are to be obtained from the Census of India. Health expenditure data are to be obtained from the National Health Profile of India for various years. Econometric models to be applied Fixed effects panel data model to analyse the relationship between healthcare expenditure and health outcomes. Semi-log growth model is to be applied to estimate the trend for health indicators.

Why Space Matters in Explaining Women's Status in Meghalaya?

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The Khasi society of Meghalaya is such a society, commonly known as matrilineal, where authority, title, inheritance, residence after marriage and succession are traced through female line. So it is presumed that they do not require any special effort to make them aware and get social, economic, political or psychological understanding and knowledge to establish their rights along with men in their society as they are automatically placed on an esteemed level. They are presumed to have access to education, ownership of property, authority in their family and society; they are the heads of their families and decide what to be done or not, etc. In the political sphere, hardly anybody is there who is female and even in the Dorbar (Community Centre); females are not allowed to take part in the meeting or decision-making. Most of the socio-economic activities, dominance on female is observed even though they are assumed to be physically weak. Therefore, a question may arise whether in Khasi tribe the status of women is ascribed or prescribed by the society. Also, it is pertinent to enquire about the direction to which the position and status of women are moving with the development of the society. This paper seems to be enquired about the present status of tribal women in rural areas in Meghalaya, one state of the Northeast in India.

The Health Issues of Elderly Women in Two Tribal Villages of Assam

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Abstract: Population ageing is an obvious consequence of the process of demographic transition. India's elderly population is expected to increase from 76 million in 2000 to 327 million in 2050. The growing number of the aged persons is not in itself a social problem, on the contrary, nation's prize longevity and counts it an accomplishment, not a failure, that the increasing number of man and woman is live to old age. The problem is the lack of preparation for the sudden appearance of large number of aged people and lag in adopting social institution to their needs. In our society, utmost regards is paid to the elderly citizens since time immemorial. But due to the increasing process of urbanization,

industrialization, modernization and as a result of globalization and economic liberalization, structural changes have taken place in the traditional social institutions, which works as welfare institution for the aged. In the changing circumstances, the aged has to face different kinds of problems such as physical and mental health problems, economic problems and socio-psychological problems. In the present paper, an attempt has been made to study the health status of the elderly in two tribal villages of Assam. The study is based on 160 elderly women.

Mental Health of the Women Relating to Harassment at Work Place

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The aim of present day society towards women is to empower them. The act relates to gender- based violence that results in or is likely to result in physical, sexual, mental harm or suffering to women whether occurring in public or in private life. Harassment of women at work place is general, even at the micro level. International survey has found that between 40% and 90% of women suffer some form of violence and harassment during the course of their working lives (ILO, 2008). There are different act and laws for violence against women. Irrespective of the law and awareness, the percentage of gender-based violence has increased. Violence and harassment at work has immediate effect on women including lack of motivation, loss of confidence, reduced self-esteem, depression, anger, anxiety and irritability. As with stress, these symptoms are likely to develop into physical illness and mental disorders, and increased risk behaviours like tobacco and drugs. They may result to occupational hazards, accidents and even suicide (WHO, 2000). The study was conducted in working women of different socio- economic groups from lower level to Executive Groups of Districts – Balangir, Odisha. The findings of the study were that women accept the harassment because of their living condition as it is directly related to their economic status, dignity in society or fear of creating problems in their personal life. As a result, depression and mental hazards act as a barrier in the empowerment of women.

Determinants of Intimate Partner Violence (IPV) in Bihar: Experiences from District Level Swasth Survey (DLSS 2015-16)

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Background: Sector-Wide Approach to Strengthening Health (SWASTH) programme (2010-16) aims to improve the health and nutritional status of people in Bihar, particularly the poorest and excluded. This paper sought to identify the strongest determinants of IPV in the last 12 months and to develop policy suggestions for the Government. A conceptual framework was developed to identify potential predictors of IPV amongst EMW; predictors were categorised at 5 different levels: individual, relationship, household, community and society.

Methods: DLSS 2015-16 data (57,841 EMW in 15-49 age groups) was analysed to identify which of the variables identified in the conceptual model were significantly associated with IPV using multiple logistic regression modelling.

Results: The analyses reveal a high prevalence of IPV (35%), and multiple IPV risk and protective factors. The strongest risk factors appear to be experience of violence since the age of 15 years, and this was not restricted to violence by the husband – other members of a woman's family, particularly mothers, were implicated. This suggests the need to ensure that the efforts to reduce IPV do not concentrate solely on men as perpetrators of violence, and that a longer term outlook beginning with secure and violence-free childhoods, and adolescence will minimise future IPV. Another strong risk factor for IPV was the frequency with which a woman's husband got drunk; the more frequent a husband's drunkenness, the more likely a wife was to have experienced violence from him. It will be important to monitor the effect of the policy to restrict alcohol in Bihar (already in effect) on IPV.

Social Identity as Determinants to Access Maternal Health Services in Uttar Pradesh

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Reduction in maternal mortality is one of the important sustainable development goals. India alone shares almost one-fifth of world maternal deaths. Within India, Uttar Pradesh continues to be the highest in maternal deaths. Despite the unavailability of data on maternal deaths in India, it is evident from proxy indicators on mother's wellbeing that women belonging to lower caste are more vulnerable to maternal deaths than women of higher caste. Several studies are available on the causes of poor accessibility to maternal health services but there is hardly any study focusing on caste as hindrance to access maternal health services. Therefore, the present paper attempts to study the accessibility of maternal health services by different social groups controlling education and wealth. The study uses data from National Family Health Survey-3. Unit of analysis was the women who had home delivery. Dependent variable was the visits made by any health personnel to women who had home delivery. Binary logistic Regression analysis reveals that after controlling wealth and education, scheduled caste women were more than two times less likely to be visited by health workers compared to higher caste women. Similarly, educated women of scheduled caste had less accessibility to health services than the educated women of higher caste. Findings suggest that the social identity of a woman is more important than her economic and education status in accessing the maternal health services. This shows serious implication on implementation of several maternal health policies in India.

A Statistical Analysis of Trends in Mortality from Major Infectious Diseases of Global Burden, 1990-2013

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Infectious diseases are the world's foremost cause of death that presents one of the most significant health and safety challenges facing the global community. Studying about infectious diseases has become an important aspect because of its unexpected fluctuations in mortality rates and changing the demographic scenario of any nation. This paper provides an outlook in the trends of mortality rates major infectious diseases (ID's) at the global level using the data from the Institute for Health Matrix and Evaluation (IHME). The data has been tested for the normality by Shapiro-Wilk test and transformed into normality by using Box-Cox transformation to get the consistent results and Joinpoint Regression analysis was carried out to estimate the Annual Percent Change (APC) and it shows a gradual decrement from 1990 to 2013 in the death rates from IDs. But, in case of HIV with TB, HIV/AIDS and Malaria, the death rates increased till 2004 and later it was decreased gradually along with the age adjusted mortality rates. The join point regression method also identifies different inflation points to the different IDs. The disease like Lower Respiratory Infectious shows highest death rate among other major IDs followed by HIV with TB and decrease in recent years and least rates in Intestinal Infectious Diseases. The implementation of health policies by WHO and the advancement of technology reduces the mortality rates of Infectious diseases.

Role of Community Leaders in Addressing Unmet Need for Family Planning in Rural Coastal Odisha

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Addressing unmet need for family planning is one of the major immediate objectives of India's population policy 2000 (MoHFW, 2000). The policy also advocates the involvement of elected leaders of Panchayat Raj Institutions (PRIs) in addressing unmet need for family planning. Besides, the National Rural Health Mission (NRHM) also highlights the importance of PRIs and other community leaders in addressing the family planning services. The 73rd Constitutional Amendment Act, 1992, also guarantees Panchayats to take responsibility of the health and family welfare. To know the actual involvement of community leaders in addressing unmet need for family planning, the field survey was carried out in coastal part of Odisha. With the help of mix-methods, the actual participation of community leaders in family planning is found negligible. The field study, including survey and in-depth interview of health workers and community leaders, reveals lack of financial allocation for the family planning activities in the Gaon Kalyan Samiti, lack of fund for the village health plan, lack of inter-departmental co-ordination, lack of trust and confidence between the workers and leaders, lack

of initiative by the workers to involve leaders, and lack of incentives for community leaders, are the major reasons for non-participation of community leaders in the family planning activities.

Functional Disability Status among the Elderly Persons and Its Predictors in Kerala and Maharashtra States: An Analysis of BKPAI, 2011 Data

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An attempt is made, in this paper, to examine the magnitude of functional disability among the elderly and its predictors in Kerala and Maharashtra states for which data has been drawn from 1,353 and 1,435 elderly persons, respectively (as part of BKPAI, 2011 survey). The functional disability status of the elderly is measured with Lawton and Brody's Instrumental Activities of Daily Living (IADL) Scale by assigning scores to elderly' ability to do or not the eight day-to-day activities (the summary score ranges from 0 – no functional disability – to 8 – have high functional disability), which has been analysed adopting correlation and multiple linear regression techniques. Regression analysis results revealed that, in both the states, the magnitude of functional disability status of the elderly has shown an increasing trend with an increase in their current age, whereas such pattern has decreased with an increase in their years of schooling. Further, in both the states, while the likelihood of functional disability among the elderly noted to be much lower among those who are working for wages and self-reported their health status as fair/good, such likelihood is observed to be higher among those who are co-residing with children/others than their respective counterparts ($p<0.001$ for all cases). Place of residence, gender, marital status, wealth index of households, number of chronic morbidities and physical disability index have also exhibited independent effects of the functional disability of the elderly, but differentially across the states. Detailed discussion and suitable policy implications are provided in the paper.

Health Management Information System in Madhya Pradesh: Issues and Challenges

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Introduction of Health Management System (HMIS), technology-driven web-based health care services reporting system, has put many challenges for changing the existing system of health care data reporting. HMIS enables policy makers and programme managers to assess the level of achievements and progress of health care services. The objective of the paper is to assess the quality of district level HMIS data reported in M.P. and to portray the issues and challenges for improving reported data quality. The study used the data uploaded on HMIS portal. Number of districts reporting 75 per cent

and more data has increased from 12 to 48 during 2010-11 to 2015-16. Reporting of maternal and child health services related data shows improvement in ratio of reported ANC to expected ANC cases. It has increased by three folds in 17 districts. Number of districts increased from 20 in 2010-11 to 33 in 2014-15, which have more than 25 per cent unreported deliveries. Data on health events and vital events are not reported by as many as 30 districts. Total number of deaths reported in HMIS during 2010-2014 is much less than the deaths registered under civil registration system. For health system monitoring HMIS has become an inevitable tool. To augment the HMIS data quality, its continuous usage, training of health personnel, ownership at district and facility level is essential.

Traditional Practices and Newborn Care: A Study in the Rural Areas of Balangir District, Odisha

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Traditional beliefs and practices have been prevalent in every area of life including health, in general, and child health, in particular. The traditional practices and beliefs are handed down by the elders or ancestors to their offspring from generation to generation. Some practices may be effective while some cannot be explained in medical terms as their efficacy is not established. Here, the present study is an attempt to examine the prevalence of various types of traditional practices for the newborn care in Balangir (District having highest IMR in Odisha) district. The study also examines the differentials in traditional practices for newborn care. The present study is based on a primary survey, which was conducted during my doctoral research. Ever married women having at least one child below five years of age are the respondents of this survey. A total of 288 women were interviewed to know the practices related to child care. Statistical techniques such binary logistic regression and multinomial logistic regression was carried for analytical purposes. The results show that more than half of babies were applied certain traditional substance (oil, dung, etc.) on the umbilical cord, which is not necessarily aseptic, and can be potentially harmful to the baby. Besides, massage on baby's abdomen is widely observed. Early bathing just after delivery was common. Also use of cold/normal water for baby's first bath found pervasively. Socio-economic factors like caste, education, standard of living, etc., found to play a large role in determining the prevalence of traditional practices for newborn care.

A Brief Analysis on the Childhood Immunization in the State of Nagaland

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When all the children are administered with all the required immunizations, it is possible that Vaccine Preventable Diseases (VPD) can considerably reduce the morbidity and mortality of the children. The

observed increasing trend in the percentage of children, who had fully immunized in the country in the last decade, is quite satisfactory. Though the level has increased, noticeable variations in the level of fully immunization were also observed. Among the states in India, Nagaland shows the lowest level of full immunization. The percentage of children of 12-23 months, who had fully immunized, was 35.6 in DLHS-4 and was 27.8 in Coverage Evaluation Survey 2009. The objective of the paper is to understand the level and trend of fully immunization of children in Nagaland as compared to other states, especially other north eastern states, and to understand the differentials among the districts in Nagaland. DLHS-4 fact sheets of Nagaland are mainly used. Nagaland is one of the smallest states (19.8 lakh) in India. Nagaland features with low population density (119 per square KM), difficult terrains, different tribes, many languages, many misconceptions and mistaken beliefs, high percentage of non-institutional deliveries, low level of contraceptive use and frequent occurrence of insurgency-related problems. These obstructing factors mainly pull the level of fully immunization down in the state. Moreover, the differentials among the districts are also noticeable. The level of fully immunization ranges from 13.5 per cent in Wokha district to 60.9 per cent in Mockochung district. Related reasons for the low level of immunization are also discussed.

Tribal Elderly Women and Their Health: A Sociological Study (with Special Reference to Nandurbar and Jalgaon Districts)

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Introduction: There are 427 groups and have been recognized as scheduled tribes in India. They form approximately 8% of the total Indian population. Tribal people are suffering from so many diseases, but tribal elderly women's health problems are different from male tribal elderly. The health and nutrition problems of the vast tribal population of India are as varied as the tribal groups themselves who present a bewildering diversity and variety in their socio-economic, socio-cultural and ecological settings. Some of the preventable diseases such as tuberculosis, malaria, gastroenteritis, filariasis, measles, tetanus, whooping cough, skin diseases (scabies), etc., are also high among the tribal. This paper explores the Health problems of the tribal elderly women.

Objectives:

1. To study the socio-demographic characteristics of the tribal elderly women.
2. To identify the health problems of the tribal elderly women.
3. To find out the problems faced in accessibility of health services by these women.

Research Methodology: This study based on Primary as well as Secondary data. The sample was drowning by randomly from the tribal family. Fifty respondents have been chosen for this study.

Conclusion:

1. The tribal elderly women most of them were housewives and had no income. They depended on their children for food and shelter and all the other needs.

2. All respondents had health problems, the most common being hypertension, arthritis, diabetes, or constipation.
3. With increasing age, the health problems increase but the economic resources of the elderly usually show a decline.

Utilisation of RH & FP Services in Bihar with Special Reference to Rajgir Block of Nalanda District

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The present study aimed to examine the availability and accessibility of reproductive health and family planning services, the quality of services provided at the health facilities and the attitudes towards utilization of services in Bihar as well as perceptions of Services providers (Policy making as well as implementer) and beneficiaries regarding the services.

Methodology: In the present study, both primary and secondary research techniques were used. The study was conducted in Rajgir Block of Nalanda district. The project site selected was based on the responses of the target groups. Semi-structured interview schedule was prepared to gather information from the service providers, specifically In-charge of PHC/SDH, Doctors, RH and FP Counsellors, Nurses 'A' Grade, ANM, ASHA and target respondents. Case study method was also used to collect real life experiences of the respondents.

Findings: Most of the beneficiaries in this block reported awareness about the following services

- Condoms
- Intrauterine device (IUD)
- Male Sterilization
- Female Sterilization
- Contraceptive Pills
- Medical Termination of Pregnancy/Abortion
- Counselling Services

Some of the educated beneficiaries in this block reported awareness about Rhythm Method and modern contraceptives like injectables. 50-55 per cent beneficiaries in this block reported availability and hence mostly utilization of the following services:

- Intrauterine Device (IUD)
- Condoms
- Female Sterilization
- Contraceptive Pills
- Counselling Services

According to most of the service providers the following services are available and mostly utilised are:

- Intrauterine device (IUD)

- Condoms
- Female Sterilization
- Contraceptive Pills
- Counselling Services

Lack of trained human resource regarding RH and FP services as well as lack of physical resources also poses problems in outreach at grassroots level.

Knowledge and Practice of Hygiene among Young Mothers in Caring Young Children: Evidences from Rural Setting

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Hygiene is one of the crucial factors in preventing many communicable diseases. Particularly diarrhoea, pneumonia and many other diseases occur due to lack of personal, household and environmental cleanliness. Daily bathing, washing hands before serving and consuming food, washing hands with soap after using toilet, using toilet for defecation, etc., are the simple hygiene practices one can easily follow in day-to-day life. With this background a study was conducted to assess the level of knowledge and practice of hygiene in child care among young mothers. Respondents were selected using systematic random sample method and the villages were selected using PPS method from all the four taluks of the district. Mothers' knowledge on hygiene was significantly high (87% to 98%) in four out of six indicators used for assess the knowledge. The drinking water hygiene and proper disposal of babies stool were least known. Overall, knowledge of hygiene was low among socio-economically backward mothers. It was observed that extent of different hygiene practice varies widely from 64 per cent for 'washing hands with soap before feeding the child', to more than 95 per cent for 'eatables kept in a covered container'. Family members were the most common source of information on hygiene.

Migration and Development in Raigad District, Maharashtra: An Analysis from Indian Census Data

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Migration is one of the three major components of population change. Migration refers to leaving of some political or administration boundary for very long duration so as to be called almost as for a permanent period. In the modern era, migration is said to be one of the indicators of development as most of the people professionally move from uncertain agriculture economy to assured industrial

economy; from superstitious believes to rational behaviour; and from traditional rural lifestyle to modern lifestyle. The towns and cities like Mumbai provide an opportunity to many in-migrants from rural and urban areas of various states of India for socio-economic and health development. This paper tries to study the levels and trends of migrants of Raigad district of Maharashtra and the infrastructural development by using the data from Census of India. The basic results show that there has been a considerable increase in the number of migrants and a lot of infrastructural developments in terms of educational, health and economic, and recreational institutions over a period of time.

Mental Health of Women in Rural India: Issues and Challenges

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Mainstreaming mental health issues is pertinent in the present context, because women disproportionately suffer from mental health disorders and are more frequently subject to social causes that lead to mental illness and psychosocial distress. Mental health is a recent construct, and problems related to it are often completely neglected and considered a taboo in India. The present paper focuses on the rural women in EAG states of India, because reliable data on women's mental distress and illness is not available. Findings of Annual Health Survey (2010-11) in Empowered Action Group states, which represent one-third of the backward districts of India, indicate that at least 23-28 per cent of the households in rural areas belong to lowest wealth index, and women representing these may be vulnerable and at a higher risk of stress and poor mental health, which needs to be mapped to build evidence for mental disorders and mental health interventions. Mental disorders may be exacerbated by violence, physical, emotional and sexual. National Family Health Survey (NFHS-3) shows that nearly 40 per cent women in the country mainly belonging to rural areas, from the lowest wealth index and with no education are more likely to be victims of domestic violence. Such women suffering in silence may exhibit symptoms of depression and anxiety. Evidence-based planning and intervention for rural women is suggested to ensure their well being.

Socio-Cultural Dynamics of Maternal and Child Health in Urban Slum in Delhi

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Maternal and child health care has been one of the priority areas in the development of health services in urban slums. This emerging issue is being highlighted because of high prevalence of maternal mortality, neonatal death, infant mortality and underweight malnourished children who are being

vulnerable and suffering their lives in the given socio-cultural milieu of urban slum areas. The main objective of this paper is to establish the socio-cultural determinants being perceived and practised on account of maternal and child health in the urban slum of South Delhi district. In order to accomplish this objective, data have been collected from 400 pregnant and lactating women. Collected data have been analyzed using SPSS version 20. The findings of the study have shown as the educated respondents have done a higher degree of ANC registration (98.1%) and three ANC check-ups (82.4%) compared to those who are less educated. The highly educated respondents were less likely to believe on cultural beliefs associated with ANC services utilization. In the context of socio-cultural factors, a significant number of respondents have beliefs and practices in 'Godbharai'. Institutional delivery was relatively higher among the mothers who were from higher education background than those illiterate mothers. Most of the mothers have not been influenced by cultural beliefs associated with child immunization. In view of slum environment, it is concluded that the existing IEC and BCC strategies of MCH should be strengthened by reducing barriers of socio-cultural beliefs and faiths perpetuating in the slum areas.

Knowledge Management & Public Health of the 21st Century: A Perspective

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With the emerging pattern of diseases, this is a challenging time for global public health, and particularly for the fragile health of populations in developing countries. However, the increasing resources for international and growing demand to improve health systems offer an opportunity to foster health equity in countries most in need. The mission of WHO Knowledge Management (KM) is to help bridge the "know-do gap" in global health by fostering an environment that encourages the creation, sharing and effective application of knowledge to improve public health. In this context, this study is an attempt to critically examine and analyse the factors responsible for and challenges to strengthen public health system. An inter-sectoral global public health supported by ICT can better ensure the health of communities and improve the performance of health systems by getting the right knowledge to the right people, such as policy makers, health system managers, public health practitioners and to the general public. Creating and developing a global knowledge sharing network for public health through close partnership with the professional public health associations, schools, institutes and others working in the field of public health will assist in bridging know-do gap in public health.

Methodology: This study is analytical in nature and based on secondary source of data for analysis and explanation.

Understanding Masculinities to Improve Male Involvement in Women's Reproductive Health

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The 1994 International Conference on Population and Development (ICPD) in Cairo, being the largest ever conference held on the subject, was able to establish the dire need for involving men in the discourse of improving women's reproductive health. This arises, in part, from the fact that men play a key role in various aspects of women's health as, in most countries; they are at the helm of decision-making procedures, whether it be about the size of the family at the personal level or the health policies at the political level. But the more important part lies in realising that in order to attempt to eliminate underlying masculinities as one of the causes of low standards of women's reproductive health, it is imperative that it be brought to light first.

The feminist perspective extends the examination of men's involvement by critiquing patriarchal power structures that restrict women's autonomy and access to resources. One of the pillars of this social construct of patriarchy is a set of deeply ingrained traits of masculinities. Masculinities dictate for men what kind of clothes they should wear, mannerisms they should have, among others. In case of women's reproductive health, they dictate how many children a man should bear with a woman, what method of contraception should she practice, if at all, among others. What remains to be understood is that how willing are we to debunk these social constructs and move inclusively towards improving male involvement in women's reproductive health?

ICDS and Its Success in Assam: A Case Study Based on Dibrugarh and Tinsukia District of Assam

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ICDS in Assam started in 1975, on an experimental basis, in Dhakuakhana project of Lakhimpur District. Since then, with its universalization, the ICDS programme in the state has expanded to 230 projects with 58, 118 operational AWCs. During the initial phases of expansion, when BPL was the criterion for sanctioning AWCs, particular populations, such as tea garden and some urban populations, were ineligible for ICDS services in Assam. In the third phase of expansion starting from 2006-2007, new projects and AWCs have been sanctioned to cover these areas, based on the criterion of need. The present study focuses on Dibrugarh and Tinsukia, two of Assam's 27 districts. The GoI requires the services of ICDS to be delivered uniformly throughout every State and Union Territory with no exceptions. Accordingly, the present study aims at finding out the result and success as well as failure of ICDS along with the difference in ICDS services provided by AWCs in Dibrugarh and Tinsukia

districts of Assam. The study will be based on secondary data collected from Annual Report (2012) of District Social Welfare Office, Dibrugarh and Tinsukia, the report from Department of Social Welfare, Government of Assam, such as 'Statistics on Year-wise Expansion of ICDS in Assam, '1975-2012', report of Government of India, such as 'ICDS March 2012 Statistics', and National Rural Health Mission, Assam State Report, June 2009 and various other reports from Department of Social Welfare, Government of Assam on Integrated Child Development Services.

Psychological Aspects of Healthy Ageing in India: A Literature Review

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Population ageing is one of the important aspects in the study of population and development. Ageing refers to the biological process of growing older in a deleterious sense. Ageing is one of the most complex biological processes, whose definition is intrinsically related to its phenotype. Ageing is the process of becoming older. In humans, ageing represents the accumulation of changes in a human being over time, encompassing physical, psychological, and social change. Population ageing is a phenomenon that occurs when the median age of a country or region rises due to rising life expectancy and/or declining fertility rates. Healthy ageing is the development and maintenance of optimal mental, social and physical well-being and function in older adults. This is most likely to be achieved when communities are safe, promote health and well-being, and use health services and community programs to prevent or minimize disease. Healthy ageing includes physical, psychological, social, and spiritual well-being in later years. The purpose of this study is to identify the psychosocial factors influencing healthy ageing and examining their socio-demographic characteristics. Perceived health status, depression, self-esteem, self-achievement, ego-integrity, participation in leisure activities and loneliness were identified as influential factors in healthy ageing. This study makes an attempt to review various literatures focussing on the psychological aspects of healthy ageing coupled with other socio-economic and health aspects; understand the perceptions of various key persons on healthy ageing; and suggest ways and means to sustain and improve healthy ageing at community level, state level and national level in India.

Application of Multiple Correspondence Analysis to Identify the Risk Factors of Partner Violence in Bihar and Chhattisgarh

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Multiple correspondence analysis (MCA) is used for the analysis of categorical variables encompassing more than two categories. MCA, part of a group of descriptive method (viz., clustering, factor analysis

and principal component analysis), reveals patterning in complex data base and reveals variation of variables with respect to the categories for selected dimensions with graphical presentation. This research paper aims to identify the specific risk factors of Partner Violence by using multiple correspondence analyses. To achieve the objectives data were collected from NFHS3 for the Bihar and Chhattisgarh states where prevalence of partner violence is high. A set of risk factors such as age of the currently married women, place of living, marital duration, wealth index, husband drinks alcohol and women exposed for ever emotional violence have been identified. MCA has been applied for the set of Bihar and Chhattisgarh data. Examining the model summary in Chhattisgarh, first and second dimension accounting for 14.28 per cent and in Bihar it was observed 14.24 per cent. Discrimination measures reveal the age of the respondent, and marital duration contributes highest variation in Chhattisgarh, and in Bihar Marital duration exhibits higher variation than age group. Bi-plots reveals that in Chhattisgarh younger age of mother lower marital duration, and in Bihar higher age of mother, longer marital duration contribute more variation towards dimension-2 in identifying emotional violence. Methodological derivations are illustrated in the research paper.

Strategies to Improve the Performance of Female Health Workers: A Cross-Sectional Survey

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India suffers from the world's worst maternal mortality and among the worst newborn and child mortalities. A leading barrier to improving these health indices is limited frontline health worker capacity. Female health workers in India face an increasing workload that affects their performance. Hence, it is essential to quantify their workload and identify determinants of good performance and thereby build health worker capacity through participatory training.

Methods: Random sampling of female health workers from the healthcare sector was done. An observation of work sessions was carried out. The performance was evaluated using indicators according to selected potential determinants.

Results: Female health workers spent 50% of their time in documentation. Availability of a private space was associated with average coverage in antenatal check-up and family planning. Workers who used existing resources to cope with multi-tasking performed better.

Conclusion: Infrastructure, planning and supervision affected performance; these areas must be strengthened to improve primary care. A limited health worker cadre, however, represents a significant barrier.

Diabetes and Its Control: Role of Diet and Exercise

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The National Health Mission (NHM) is a combination of two Sub-Missions – the National Rural Health Mission (NRHM) and National Urban Health Mission (NUHM). The main objective of NHM is to achieve universal access to equitable, affordable and quality health care services that is accountable and responsive to people's needs. Non communicable diseases (NCD) account for 53% of the total deaths (10.3 million) and by 2030, NCDs are projected to cause up to 67% of all deaths in India. An Indian today has over twice the odds of dying of a non-communicable disease than a communicable disease, according to the World Health Organization. Most common among NCDs are hypertension and Diabetes Mellitus, and common risk factors are tobacco use, unhealthy diet, physical inactivity and alcohol use. The rising burden of NCDs calls for concerted public health action. In this connection the present paper is an attempt to study Diabetes Mellitus. According to statistics from the International Diabetes Federation (IDF), India has more diabetics than any other nation of the world (presently 62 million). The main emphasis of the paper is on lifestyle changes, which includes diet and exercise. For this, the subjects included are both women and men (longitudinal study) suffering from diabetes through case studies. Diet pattern, exercise and glycosylated haemoglobin levels (HbAIc) are noted. The study concludes that diabetes by and large can be controlled by making simple changes in the diet and by doing exercise every day or simply by changing lifestyles.

Popularising Indigenous Systems of Medicines

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Indigenous Systems of Medicines (ISMs) have been used for many millennia. In spite of its decline, currently there is a return to the ISMs worldwide. Documenting the specific ingredients that go into a particular medication along with the dosage pattern is absolutely necessary. This is an important step to make it easier for scientists to accept ISMs and to popularize its wider use. The wisdom of the older generation should not be allowed to die with their deaths. Scientific research on the use of ISMs is another major requirement, if ISMs are to be used more widely. Design experiments to test the claims of ISMs. Study the mechanism of their function. Combination of ingredients and their dosage along with standardization is another area of research. A variety of ISMs that are in practice is presented. They are not just formal systems like Siddha, Ayurveda, Unani and Homeopathy. Natural herbs also have an important role in ISMs. In recent years, these are being actively promoted. Some of the most common herbal medicines are: drumstick leaves, aloe vera, rosella, vasambu, and thulsi. Ginger, pepper, thippili and turmeric are some of the substances used in Indian cooking that have great medicinal value. Disseminating-related information is necessary to popularize ISMs. These could be carried out through conferences, research-based scientific publications, books and newsletters sharing community experiences and case studies. Lack of support from allopathic doctors has been one reason why ISMs are not popular. Getting them on board would make this effort even more effective.

Designing a Controlled Ventilation Onion Storage Structure and Creating Awareness among the Selected Beneficiaries in Erode District

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Onion is one of the most important commercial vegetable crops grown on a large scale in India. As the onion is stored for a longer period to use during off season, considerable losses occur by the way of rotting, sprouting, weight loss and moisture evaporation. The modified outdoor and indoor storage structures were developed and the study was carried out with the physical and nutrient analysis. No significant result was obtained among the macro nutrients and minerals. The opinion of using indoor storage structure by the beneficiaries was found to be useful. This present study concluded that purchasing of onion at low cost will make the consumer to consume adequate onion during price hike also by using proper storage structures depending upon the onion consumption. Purchasing onion at low cost during glut season also pave the way for the traders to sell the onion at high cost during off-season. Large storage of onion fetches greater profit for the farmers during price hike. Hence, this study has given emphasis not only health point of view but also cost benefit to the consumers and traders.

Differently Abled: Existing Status and Future Strategies

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Health is a significant indicator of development of a nation, where disability plays an important role. The demographic and epidemiological perspectives of health are the popular thrust areas while disability, a major part of health issues, remains unrecognized. This paper focuses on the demographic scenario, problems and challenges of the disadvantaged group based on Census 2011 data. The major findings were as per 2011 Census, there are 26.8 million persons with disabilities in India. There are 14.9 million men with disabilities as compared to 11.8 million women in the country with the total number of disabled over 18 million in the rural areas and just 8.1 million in the urban area. The percentage of men with disabilities is 2.40 as against 2.01 in women. Literacy levels are low, estimating that 45.5 per cent of persons with disability are not literate. The proportion of differently abled is higher in rural areas. It is also noted that differently abled were 2.68 crore, of which 1.57 crore are in the working age group. It shows that PwDs is a large pool of human resource, whose potential to contribute towards the economy cannot be ignored. Empowering the person with disability should be the main focus and bringing about different strategies should be the corner stone for working effectively with this segment of our society. It requires better coordination and networking with different departments and agencies working on the issue.

Cultural and Environmental Dimension of Indigenous Health Care System among the Karbis' of Karbi Anglong, Assam

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Health is regarded as a system of physical, mental and social well being without being merely an absence of any disease. The tribal people of India are mostly dwelling in the high hills and isolated forest covered region, and depend upon a number of natural resources. The traditional health care practice of the concerned people deserves a special attention. The present study has been done on the Karbi tribal group of Karbi Anglong, Assam. The district was largely covered by a forest and several other natural resources. Such resources were used by them in every perspective of their livelihood. They had a strong belief on different supernatural powers and its impact on their health. They were very much psychologically depended upon the traditional healers and medicine man for the treatment related to their health sufferings. The concerned healers used a number of locally available plant resources for such treatment. It was part of their indigenous knowledge of health care system and it was transmitted through oral tradition. In the cases of reproductive mother-child health, a number of faunal resources were also used by them. The present study has the prime objective to reveal the relationship between traditional cultural practices, environmental resources and indigenous knowledge of health care system among the Karbi people. The study has been primarily conducted through intensive field work. Several anthropological methods like case study, genealogy, interview, observation are used in this regard to collect the qualitative data.

Are Matrimonial Websites Altering the Marriage Norms? A Demographic Nuptial Exploration of Two States with Different Levels of Sex Ratios

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High SRBs have led to female deficit situations in North-west parts of India. Thus, the bride shortage is bound to bring severe marriage crisis. In Indian scenario, where marriage is almost universal there will be inevitable changes in the marriage patterns, practices and prevailing norms. Thus, online matrimonial sites can prove to be a great use for people or families from the states of low sex ratios, who find difficulties in finding bridegrooms from their own state. Research on social online personal matrimonial match-making is limited in the context of India. Little is known about the demographics of people who resort to the use of matrimonial sites.

Methodology: A comprehensive quantitative content analysis of media, in the form of online matrimonial sites will be studied in this paper. The prelim overall demographic analysis has considered all the grooms' profiles available on shaadi.com without using any filters on a single day.

Results: Most of the profiles posted by the grooms are unmarried followed by divorced. While we compared the distribution of marital status of grooms' profiles from India, Punjab and Tamil Nadu, we found that the proportion of unmarried men from Punjab exceeded the India level and Tamil Nadu both. Every tenth groom belongs to age 35 and higher, which may indicate the fact that people who are unable to find bride locally or elsewhere due to higher ages, are resorting to matrimonial sites.

A Retrospective Study on Trends and Facts of Leprosy Prevalence in Purulia District, West Bengal

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The aim of this study was to observe the trends and fact of leprosy prevalence in Purulia district, West Bengal, after declared eliminated leprosy in India. A retrospective study was conducted using District-wise Annual New Case Detection and Prevalence and District-wise Proportion of Deformity Grade-II published by National Leprosy Eradication Programme (NLEP) from 2007 to 2015. In India, prevalence of leprosy as of March 2015 was 0.69/10, 000 populations. A total of 1.26 lakh new cases were detected during the year 2014-15, which gives Annual New Case Detection Rate (ANCDR) of 9.73 per 100,000 populations. Of the 669 districts, 137 districts still have prevalence rate >1/10,000, and rest of the 532 districts have prevalence rate (PR) <1/10,000 population. As on March 2015, only 40 districts in 9 States/ Union Territories are having prevalence rate (PR) > 2/10,000. The Purulia district having a high prevalence rate (PR) of 3 >10,000, which is far higher than the national prevalence rate (0.69), though the country has declared reached the mark of elimination. The Government of India is continuing the remarkable work to eliminate and reduce the case load under National Leprosy Eradication Programme (NLEP) since 1953. The case load of leprosy was considerably controlled by the programme at the national level, however, NLEP is constantly marching towards to eradicate the leprosy at the district and block level. Moreover, the country needs to focus and implement new strategy at the grassroots level to remove the stigmatized disease from the purview.

Socio-cultural Factors Influencing Demographic Behaviour in India

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Democracy is related to human behaviour. Human beings are social animals and hence their behaviour in general and demography behaviour in particular is the product socio-cultural conditions of a society. Socio-cultural conditions vary from one society to other. Hence, the demographic rates and ratios also vary. This study makes an attempt to identify various factors affecting demographic

behaviour in India. Some castes in Karnataka celebrate Puberty, declaring that the girl is now ready to enter into reproductive period. During this time, if the girl is already married, her husband will be soaked in colored water to indicate that his wife is ready for living together. Child marriages are quite prevalent in India, especially in Rajasthan and Karnataka. In Northern Karnataka it is customary for a brother to marry his sister's daughter. Fertility process also influenced many socio-cultural factors. For instance, there is tremendous pressure on a woman to prove her fecundity. That is why the gap between consummation and first conception is very short. Widowhood in India especially among the Brahmins, is highly stigmatized. In many parts of India among the Brahmins, widows are not allowed to marry and are required to shave their head and wear only white saris. The Demographic behaviour in India is highly influenced by Socio-Cultural Practices. India is considered as a sub-continent and in it each state has its own Socio-Cultural Practices. Like each state has its own language, dress habits, food habits as well as many customs and cultures affecting the demographic behaviour.

Migrants and Right to Health

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Introduction: Migration, a continuous process of evolution and a universal phenomenon. Globalisation and process of urbanisation have steered up migration as a vital aspect of livelihood. According to United Nations report-2013, there are 232 million international migrants. Mostly international migrants have received more attention than internal migrants. Whereas, the growing migrant population of 159 million in 1971 to 309 million in 2001 and 326 million in 2007-08 (Indian Census) is a crucial indicator to focus on internal migrants.

Health Condition: The aim of this paper is to focus on the vulnerabilities and factors responsible for the poor health of the internal migrants in India. Internal migrants constitutes about one-third of India's urban population, and this has been increasing from 31.6% in 1983 to 33% in 1999-2000 to 35% in 2007-08 (NSSO, 2007-08). This also shows the increasing importance of employment-related migration to urban areas. They are often employed in the informal sectors. Most of the migrants are, uneducated and poor, entering into a new environment, alienated with Government health systems results in poor health status. A few struggle and works have focused on survival and exploitation issues whereas health aspects have been given a back seat (Borhade, 2012).

Right to Health: Minimum standard of health to which every individual is entitled. Health also has inter-relationship with clean environment, safe working conditions, education about diseases and social security measures. The paper concludes with critically evaluating some of the existing policies and programmes with regards to the health of internal migrants.

A Study on HIV/TB Co-infection Mortality in India: A Probability Distribution Approach

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Tuberculosis (TB) and HIV are closely associated since the emergence of AIDS globally. While HIV/AIDS and tuberculosis (TB) can individually be the major causes for concern as standalone public health threats, the combination of the two has proven to have a far greater impact on the epidemiologic progression and, consequently, on the impact it has on the global health. It has been reported that 25 to 65 per cent patients with HIV infection and AIDS had TB of any organ. This paper aims to fitting the probability distributions to the age-wise number of deaths of the HIV and TB co-infections of the year 2013. The data have collected from the Institute for Health Matrix and Evaluation. It showed that nature of the age distribution of deaths followed the Weibull distribution and quite left heavy tailed. Deaths, due to this co-infection, are concentrated between the age group of 30 and 64 because of some behavioural reasons.

Identity and Health: A Study of Transgenders in East Delhi

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The dominant heteronormative idea of sexuality and gender binary in India has led the transgender community struggling for their identity. Stigma and discrimination with the community continue in spite of the landmark NALSA judgment in 2014. This paper studies five social determinants in daily living, viz., livelihood, education, income, stress and violence, affecting the health of hijra and kothi community. It posits the significant correlation between the social determinants and the poor health outcomes of the community. It questions the narrow definition of health which exclusively deals with the biomedical perspective and does not take into account the role of social factors and individual subjectivity and calls for an enabling environment by society and law. The paper argues forth the concept of fluidity of identity and historical presence of the third gender and their acceptance in society. It provides key insights for improved and effective affirmative actions for better health of the transgender community.

Experiences of Neonatal Deaths among the Urban Poor Migrants in Metropolitan Delhi: Poor Commination, Poor Quality and an Overwhelmed System

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Earlier studies mainly addressed levels, trends and determinants of neonatal mortality at a national or sub-national level using macro data, but few studies looked more in depth at women's experiences of the pathway leading to neonatal deaths. This qualitative study explored how poor quality of care in urban government health facilities discouraged women to use facilities appropriately. We interviewed mothers of deceased neonates through semi-structured questionnaires identified by the Health Department of North-East district of Delhi. Additionally, a group of health service providers from the Public Health Facilities were interviewed to understand the demand-supply balance of health care services. The majority of women who lost neonates belonged to deprived castes, low-income level, low education level and recent poor migrants, were living in an extremely poor urban environment. On the supply side, doctors in government facilities are overburdened with increasing demands due to migration from neighbouring regions of Delhi. The mismatch between demand and supply of health care services leads to poor quality of antenatal, intrapartum, and postnatal care, which increase the risk of neonatal mortality. Women belonging to the lower socio-economic strata in Delhi receive poor quality reproductive care. Health education and counselling to women from low socio-economic sub-groups is urgently needed, so that they can negotiate better for higher quality services in those facilities. On the supply side, further investment in improving infrastructure and enhancing the skill set of human resources is needed for improving the quality of health services in public hospitals.

Overview of Infertility with Perception of Gender Relations in Society: A Case Study of Delhi

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The need to produce and carry forward the lineage is old one and necessary in all societies in the world. Infertility is defined as situation in which couple is not able to produce after a year or more of trying. This study is based in Delhi, where ART centres were visited to gain insight regarding the available solutions for infertility. The study has tried to analyze various other socio-economic factors associated with the issue of infertility. This study is based on testimonies collected from interviewing doctors from ART clinic across Delhi. The issue related to infertility, generally don't get highlighted in spite of being an upcoming issue. The gender concepts are also related to it, as most of the time, this problem only gets associated with women. Further, socio-cultural factors related to infertility also laid impact on economic factors involved in it. According to the doctors, in most of the cases, wife is held

responsible for the problem of infertility, but in reality in 40 per cent cases females are responsible in other 40 per cent males are responsible and in remaining 20 per cent problem is common in both the partners. This study will be significant to throw light on growing trends in combating infertility in metropolitan cities like Delhi.

Demographic Dividends and Socio-economic Characteristics of Youth in India

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Usually, fertility deciles only after the onset of mortality decline resulting in rapid population growth. This, in turn, will benefit the country by supplying increased number of working population and lowering the dependent population age less than 15 and more than 65. This phenomenon called 'Demographic Dividend'. India has experienced mortality decline since 1926 and fertility decline since 1976. Accordingly, population moderately grow since 1926 and rapidly during 1956-86. The population growth rates started declining since 1986. India has achieved a substantial fertility decline since 1976. Although, fertility decline is not uniform, it could achieved replacement fertility level in many states excepting in the central parts of India. The population of India stared becoming young during rapid population growth and the young population started becoming older reaching adulthood and working ages after a gap of 15 years. Thus, India has experiencing advantage demographic decedents – more working population and decreasing dependent population. In view of this, it is felt appropriate to study the socio-economic and demographics characteristics of youth and adults when population is experiencing demographic dividends by using data from Census 2011.

Trends, Pattern and Inter-State Variation in Health Expenditure in India

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The objective of the study is to analyse the trends, pattern and linkages of health expenditure in India and inter-state variation in public health expenditure. The study is based on secondary data from World Health Organisation, Ministry of Health, India, RBI data base, NRHM and economic survey. The study uses descriptive statistics, correlation, regression, bar diagram, line graphs, granger causality, stationarity test, t-test for analysis of data. Expenditure on health is only 3.90 per cent of GDP in India and per capita health expenditure is only 59 USD. No state has ever committed more than 3.5% of its resources to the health sector. It is a fact that from 1970s, there has been a steady decline in

public sector investment in health. The public health expenditure's share in national income peaked at 1.3% of per capita GNP in mid-1980s, but since then has declined to 0.95%. In India, healthcare sector suffers from under-funding and bad governance. Private expenditure on health in India is very high, which is approximately 75% of total health expenditure. India's public health expenditure is only 17.9 per cent of total expenditure on health care, while it is close to 90 per cent for smaller countries like Bhutan and Maldives. There is high inter-state variation in public expenditure on health across the states of India. The inter-state variation in health expenditure is analysed using elasticity with gross state domestic product. The health care expenditure is desired for efficiency and equity in a country.

Training Management Information System (TMIS) in Public Health Training

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Introduction: TMIS is originally conceptualised by an institutional and technical support (ITS), project of National Institute of Health and Family Welfare (NIHFW), New Delhi, and funded by European Union (EU). TMIS is applicable at both state and district levels. The purpose of TMIS is to focus on quality assurance of public health training.

Purpose: The purpose of this research article is to learn thoroughly about the features and applications of a recently launched unique web-based application software named as TMIS. Once TMIS software is tried and tested in at least one district of every enrolled state, it will be developed and later utilised to establish a nation-wide training database management system for the health, medical and family welfare machinery under the ageis of Union Ministry of Health and Family Welfare with the support and guidance of NIHFW, New Delhi.

Conclusion: TMIS has the potential to revolutionize the way we think about training and organise training in all its different dimensions, be it operational coordination or academic coordination or transactional coordination in training. This is the age of documentation and, hence, the TMIS initiative is the need of the hour to streamline our training processes in the entire Telangana state. TMIS emphasizes on numbers as well as standards through its deeply considered features and applications. To systematize district-level data collection, compilation, updation, processing and analysis; every district should be able to enjoy dedicated services of a nodal computer data official. TMIS promises to energize our daily training routine through different ways and needs in the coming years.

Women's Experience of Ethnic Conflict: A Study among Bengali Muslim Women of Chirang District, Assam

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The most visible result of conflict is death, injury, displacement, loss of livelihood and psychological trauma. All the dimensions of conflict are inter-related, and looking into any one aspect of conflict divorced from other would limit our understanding about conflict. Conflict affects both men and women, but women are more affected by conflict, as compared to their male counterpart – partly owing to their biology and partly because of the gender role prescribed to them by the society. As women are seen as honour of the community and family so, targeting the women means targeting the honour and dignity of the community. At the community level, ethnic conflict involves a mixture of identity and the search for security where the prime contention concerns the devolution of power. An ethnic conflict raised question on the existence of entire community. Therefore, both the warring groups, in fear of being marginalized in a fix geographical area, put gendered-control over women of the warring communities. The present study is a part of larger study that includes Bodo and Bengali Muslim community of Chirang district of Assam, India. However, the present study would try to see how being a member of a particular community they are subjected to such gendered-control and what are the health consequences of such restrictions, in terms of physical health and emotional well-being. Most importantly, how class and gender intersect in shaping this consequences.

Financial Feasibility of Universal Health Insurance in India

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The purpose of this study is to assess the financial feasibility of universal Health Insurance, this means for the entire population. Health has been a major subject of concern for many years for the authorities in the relevant departments in the Government of India. Biggest concern is out-of-pocket expenditure on health making poor the poorer and pushing or holding them below the poverty line. Many schemes have been introduced to tackle the problem but the schemes and initiatives have been marred by different issues and gaps identified in the study, while some schemes have been targeted to specific region, population, specific group or occupations. Some have not been implemented properly and resulted in causing indifference to them. Some of them have not provided sufficient protection. In this paper, we have studied the existing schemes related to health insurance supported by the government, analyzed them, found the gaps. Based on this evaluation, we have discussed the possibility of implementing universal health insurance. The study is based on various secondary source of data published by government. The methodology includes analytical framework based on actuarial calculations. We have calculated the average claim amount based on actual expenditure incurred in the past to get the actual benefit needed per person of particular age.

Declining Child Sex Ratio in Maharashtra: A Tehsil Level Analysis

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Child Sex Ratio (CSR) in Maharashtra fell steeply in last two decades. By using Census data of 2001 and 2011, this paper analyzes CSR by considering socio-cultural and developmental variables using Correlation and multivariate regressions.

The findings of the analyses are: (a) 'Others' (other than SCs/STs) had significant negative impact, while STs had significant positive impact on TCSR and RCSR, both in 2001 and 2011, and the latter had less impact in 2001 and no impact in 2011 on UCSR; (b) Only sex ratio of literacy rate had significant positive impact on CSR, both in 2001 and 2011; (c) Female literacy rate had significant positive impact, while Male literacy rate had significant negative impact on CSR but slightly positive impact on UCSR, both in 2001 and 2011, and on CSR of Mumbai wards in 2011; (d) Male work participation rate had limited positive effect in 2001. However, in 2011, it became significantly positive in 2011; (e) Sex ratio of work participation rate had more significant positive influence on CSR in 2001 than in 2011; (f) in 2011, percentage of other workers had significant positive impact on CSR of Mumbai wards and on TCSR and RCSR among STs and 'Others'; and (g) Sex ratio of other workers had significant negative impact on CSR in 2001, but had significant positive impact only on TCSR and RCSR among SCs in 2011. CSR can be improved by encouraging female literacy, reducing gap between male and female literacy, by creating more jobs in non-agricultural sectors and bringing gender equality.

Nutritional Status, Knowledge, Attitude, Practice and Depression among Women with Polycystic Ovary Syndrome (PCOS) and Imparting Lifestyle Modification

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Reproductive Health of Women is of prime concern for a healthy society. Polycystic Ovary Syndrome is a heterogeneous multisystem endocrinological disorder with implications of reproductive, cardio metabolic and psychological features which forms syndrome X. The aim is to assess the Nutritional Status of Women with PCOS, their Nutritional Knowledge, Attitude, and Practice in management of PCOS, their physical activity (Global Physical Activity Questionnaire) and the depression/anxiety (Kessler Psychological Distress Scale).

Method: A convenience sample of (N=30) women in reproductive age (15 to 35 years) with PCOS were purposively selected. By interview method with inquiry schedule data were elicited. Analyses were done using percentage, frequency tables, test of significance. The findings include 70% of the respondents had oligomenorrhoea, 16.7% of them had amenorrhoea and 13.3% of them had hyperandrogenism, especially hirsutism either along with amenorrhoea or oligomenorrhoea. BMI revealed 33.3% of them

were overweight, and 53.3% were obese. 86.7% had waist circumference above normal (> 80 cm) indicating presence of central obesity. 46.7% of the respondents were having mild anaemia, and 3.3% were moderately anaemic. 60% of them had high nutritional knowledge about PCOS, its complications and management, and 33% and 6.7% of them had medium and low level of knowledge respectively. All respondents were sedentary not doing any physical activity at work, travel, or during recreational time. 33.3% of them were having mild depression/anxiety. Awareness Creation Programme was provided using prepared module on Lifestyle management the first-line therapy, targeting weight loss through reduced dietary energy intake and exercise.

Contribution of Music Therapy to Improve the Mental and Social Health

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Music therapy has proved the effect of notes on mental and physical health. Music is the most important genre of culture. And culture is the part of life. It is also taken a vital role to develop the character of human being, society and civilization. However, this genre has inner relation with song of Rabindranath Tagore. Rabindra sangit, an excellent combination of tune and lyric, written and composed by Rabindranath Tagore, is no exception. Here, the author has discussed in his paper, how the lyric, tune and melody of Rabindra sangit definitely brings a positive effect on our mind.

A Study on Adolescent Friendly Health Clinics in South Goa District

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Adolescents account for almost one-third of India's population. They are prone to suffer from reproductive and sexual health, nutritional, mental and behavioural problems. Adolescent Friendly Health Services (AFHS), which provide a broad range of preventive, promotive and curative services under one roof, can help to ensure improved availability, accessibility and utilization of health services. In the present paper an attempt has been made to assess basic infrastructure and service utilization at YUVA clinics. The study was carried out South Goa district. Facility assessment was done in selected 5 clinics by using checklist. Data was collected and cross checked with their register to know the utilization of service by adolescents in 2014. To assess the service satisfaction exit interviews were held with the clients after seeking service.

Findings: Majority of youths (99 per cent) have received counselling service, mainly on nutrition (87 per cent) followed by other general health problem (40 per cent). Of the total registered one-third of clients were availed ANC services. Majority (61 per cent) of the clients were referred to OBG. Majority (40 per cent) of outreach activities were carried out with school health teams in school, by the

ARSH staff, where as in Colleges it is less than 1 per cent. The majority (10) of the respondents were in the age group of 10-14 as well as unmarried. Majority (11) of them have expressed that the clinic is easily accessible and clinic timings are also convenient. Most of the clients were satisfied with the staff behaviour as well as the guidance and service provided.

Burden of Water-related Morbidity in the Slums of Mumbai

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Despite the huge magnitude of water-related problems among slum dwellers, the inability to collect and analyze detailed urban health data masks gross health disparities within cities. Based on primary data collected from 600 households in eight randomly selected slum sites, present study attempts to estimate the magnitude of water-related diseases in the slums of Mumbai and fill this gap. Findings from appropriate bivariate and multivariate analysis reveal that 9% individuals suffered from malaria, 5% individuals suffered from typhoid and jaundice and two per cent from Dengue in the last 12 months. Overall, 18% individuals suffered from any water related morbidity and 58% households had any water related diseases in the last 12 months. 12% and 8% individuals suffered from diarrhoea and skin diseases, respectively, in the last 30 days. Thirty per cent households had cases of at least one case of water-related morbidity, 18% households had cases of two morbidity and 10% households had 2 plus morbidity cases. Inter-slum variation was also evident in prevalence of morbidity. Wealth, personal and food hygiene, and sewer near households emerged significant determinants of water related morbidity. Slum population in Mumbai have high burden of water-related morbidity. It is necessary to focus on these vulnerable populations since their health outcomes are comparable to or even worse than the health outcomes of non-slum residents, who are often the focus of most interventions. Study calls for strict monitoring of water-related diseases among the slum residents and effective implementation of sanitary and hygiene-related programmes in these areas.

Lack of Employment, Social Network and Mental Health among Older Adults in Two Most Populous Asian Countries: An Assessment on SAGE Household Survey

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As the concentration of elderly population increases in developing countries, the quality of life for elderly needs to be alleviated. In India, elderly population increasing day by day, and it was nearly 7 per cent in 2001 and reached to 8 per cent in 2011. The data from Building a Knowledge Base on

Population Ageing in India was conducted by the United Nations Population Fund (UNFPA) in 2011. Bivariate and multivariate analysis and structural equation modelling are used to achieve the result. The result of logistic working elder was reported to be more satisfied with their life than non-working, whereas, as the age increases the odd of satisfaction (OR: 1.3), among elder increases as compared to reference age-group (60-65 years) when the educational attainment were controlled in the model-I ($p<0.0001$). The odds of stress tendency and unsatisfactory level increases as the marital status changes from married (OR: 1.2, $p<0.01$) to divorced or widowed (OR: 2.0, $p< 0.01$) when the working status, education and age were controlled in (in Model 2). The result from the paper cannot be generalized to all developing countries, but it reports some key findings and about fifty per cent of the elder who work at older ages, were reported to be felt stress due to their work and, more often, if they were supported by others felt highly unsatisfied and felt stress.

Missed Opportunities by the Programmes for Tackling Malnutrition among Children Below Three Years of Age

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Background: Since the first three years of life are crucial for child's development, it is important to understand the status of public programmes for addressing malnutrition in children below three years, especially in Maharashtra, which has significant number of underweight (39.7%), children.

Methodology: The study was conducted in three blocks from three tribal dominant districts of Maharashtra, covering 14 anganwadi centres. Total of 31 Severe Under Weight (SUW) children were sampled from anganwadi register using convenient sampling method in all areas combined. Key stakeholders were interviewed, growth trajectories of children were mapped using monthly records and thematic analysis was conducted.

Findings: Out of 31 children only one was labelled as Severe Acute Malnutrition (SAM) by Integrated Child Development Scheme, however, analysis based on weight-height measurements revealed seven children who should identify as SAM. In the case of 12 children, the underweight status had continued for more than one year, and in one case it was for 2.5 years. Major weight faltering was observed during the age of 6 month to 1 year. In 12 cases, health check-up was done only once in the past six months. Seven children had received <50% vaccination. Only additional service offered to SUW children was provision of extra Take Home Ration packets, which were not consumed due to poor acceptability.

Conclusion: Continuation of under-nourished status for prolonged duration indicates lack of effective efforts from system to address weight faltering on timely basis. Services like identification of malnutrition, nutritional supplementation, and health care provisioning, are found significantly inadequate, in case of SUW children below three years.

Living Arrangement and the Differential in Health Expenditure of the Elderly in India: An Analysis

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In the verge of population explosion we forget that elderly people makes a significant contribution. India has second largest elderly population in the world. With the rising greying population of the country, the concern for their health and health expenditure cannot be neglected. Indian society is slowly drifting away from its traditional joint family system to nuclear. The dependency ratio of aged population on young will remain forsoever. Although there has been numerous studies to explore different aspects of ageing but none has exploited the health seeking behaviour of elderly in the context of their health expenditure with respect to their living arrangement and other socio-economic background.

Data Source: BKPAI (Building a Knowledge Base on Population Ageing in India) released from ISEC, Bangalore, in 2011. Univariate and bivariate analysis techniques will be carried out.

Result: Among all the age groups, elderly prefer to live with their children more as compared to living alone or with others. In old age the percentage of elderly people living alone or with spouse is very few, but considering the number of samples the average health expenditure is more, in case when they live with spouse as compared to the elderly living with their family. The type of living arrangements among elderly people in India influences their health expenditure to a large extent.

Reproductive Morbidity, Partner's Human Capital and Health Care Utilization among Adolescents and Rural Mothers in India

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This study explores the extent to which there is a financial accessibility among mother in village community, and factors influencing in accessing health care utilization in rural region, particularly in Bihar, India.

Data and Method: Using a quantitative ethnographic approach, 650 mothers were interviewed to investigate human capital, health care utilization for reproductive morbidity among married adolescent and late adolescent in rural Bihar, India. The results were presented in the form of adjusted predicted probability for ten different groups of RM (WHO-ICD-10).

Findings: The prevalence of reproductive morbidity, such as pain related to female genital-organs and menstrual-cycle (55%) was very high among rural Indian mother followed by maternal disorder predominantly related to pregnancy and childbirth (53%). The mother with safe water and improved sanitation facility were less at such risk ($p<0.001$). The factor such as financial accessibility was one of

the strongest predictors for motivation among rural mother in deciding health care utilization for RM. The health care utilization were very high among women who discussed RM with their partner and, in turn, partner responded positively ($p<0.001$) as compared to their counterpart whose partner did not. The rural mothers with amount of five hundred/more were at 54% reduced risk of RM.

Conclusion: This study encourages to make women financially capable to reduce RM. The positive association between partner-human-capital index (Cronbach Alpha = 7.76) and mother's health care utilization infers that partner-human-capital other than financial accessibility may be significant determinant to meet reproductive health needs in rural region developing countries including India.

Health Information System in India: Past, Present and Future

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India does not have formally organized health information system (HIS). However, there are many scattered and unorganized sources of health information with several deficiencies in HIS. Hence, objective of this review article was to examine the status of HIS in India in the past and present, and recommend future course of action. Sources of health information in India may be classified broadly into two categories: 1) typical sources available in most of the countries for last many decades to centuries, of course with varying degree of accuracy, required mainly for population and fertility control, and 2) additional sources that are country-specific and designed to meet the current need for health care evaluation and implementation that emerged after reasonable improvement in population and fertility control. First stage in any HIS is data collection for two main requirements; one, for monitoring and evaluation of health programmes and two, for research purposes. Contrary to the general perception, India does possess an HMIS established and devoted to NRHM. It is a good initiative in the direction of first use of data. Regarding utilization for research and intelligence generation, availability and awareness are important. Therefore, all the health-related data need to be integrated into one system with its thorough awareness in the research community and availability in public domain. This can be achieved by making mandatory the sharing of the data collected by spending public funding with a central system designated for the purpose. The scope of HMIS may be expanded to take a lead in this direction.

Gender Difference in Health-Care Expenditure: Evidence from India Human Development Survey

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Background: While the gender disparity in health and mortality in various stages of life in India is well documented, there is limited evidence on female disadvantage in health-care expenditure (HCE).

Aims: Examine the gender difference in HCE in short-term and major morbidity in India, and understand the role of factors underlying the difference.

Data and Methods: Using two rounds of nationally representative panel data – the India Human Development Survey (IHDS) 2004-05 and 2011-12 (IHDS I and II) – we calculate morbidity prevalence rate and mean HCE by gender, and examine the adjusted effect of gender on major morbidity-related HCE by using a two-part regression model. Further, we did Oaxaca-Blinder decomposition of the gender gap in HCE in major morbidity to understand the contribution of demographic and socio-economic factors.

Results: Health-care expenditure on females was systematically lower than on males across all demographic and socio-economic groups. Multivariate analysis confirms that female HCE is significantly lower than male HCE even after controlling demographic and socio-economic factors (β=-0.175, p=0.000, CI: -0.218-0.132). For both short-term and major morbidity, a female disadvantage on HCE increased from IHDS I to IHDS II. For instance, the male–female gap in major morbidity-related expenditure increased from INR 1,298 to INR 4,172. A decomposition analysis of gender gap in HCE demonstrates that only 28.4% of the gap is attributable to differences in demographic and socio-economic factors.

Interpretation: Indians spend less on female health care compared to male health care. Most of the gender gap in HCE is not due to differential distribution of factors affecting HCE.

Effect of Women Autonomy on Maternal Care among Muslims: A Comparative Study in India, Bangladesh and Indonesia

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Social and economic status of women uses to judge the status of a country in terms of development. Women autonomy is a composition of decision making, which has the association with maternal health care. Women's belong to Muslim religion consider as more vulnerable in India. Many studies based on women autonomy in Asia and India, address that Islam is an obstacle in the development of women. In this context, this study is an attempt makes the understanding about the factors determining female autonomy among Muslims in India, Bangladesh and Indonesia, and its impact on maternal care. Demographic and Health Surveys (DHS), which are nationally-representative, global standard for systematic household surveys data have used for this study. Bi-variate and regression techniques have used to see the backgrounds affect and affect of autonomy on maternal care. Study result shows that women with higher autonomy results good maternal health care utilization.

Social Determinants of Maternal Health Care Services Utilization in Maharashtra

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Maternal health is still an issue of concern in developing countries, because of high maternal morbidity and mortality. In the case of Maharashtra, maternal mortality is as high as 130 maternal deaths per 100,000 live births. In spite of the Maharashtra state is being progressing on the social, economic and demographic front, still there is a high rate of maternal mortality, morbidity and child mortality in many of the districts; particularly in tribal and hilly regions. Therefore, the current research study is exploring factors responsible for maternal health care services utilization in those regions. The current study has been conducted in rural Nandurbar and Satara districts as part Ph.D. research study. Quantitative and qualitative approach has been used to explore the objectives. Interview method and Case Study method were used for data collection. Total 240 eligible women were selected from the 12 sample village from the two districts. Key informants' interviews include health care providers and social workers. The study found that there is low utilization of maternal health care services in rural Nandurbar compared to rural Satara district. There is further variation within district in hilly vs. plain region. There is difference between hilly regions in Satara and Nandurbar. Satara district shows better performance than Nandurbar. Within hilly regions, farthest villages show lower proportion of institutional delivery in Satara district. Study found that geographical, distance and availability of transportation, socio-economical, availability of health infrastructure and attitude and behaviour of health care provider were major factor responsible for maternal health care services utilization.

Maternal Health Programmes in India: A Study of Women and Health

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Promotion of maternal and child health has been one of the most important objectives of the Family Welfare Programme in India. The need for bringing down maternal mortality rate significantly and improving maternal health in general, has been strongly stressed in the National Population Policy. This policy recommends a holistic strategy for bringing about total inter-sectoral coordination at the grassroots level and involving the NGOs, Civil Societies, Panchayati Raj Institutions and Women's Group in bringing down Maternal Mortality Ratio and Infant Mortality Rate. Source of information is taken from Sample Registration System (SRS) during 1998-2007. The Maternal Mortality Ratio in India is 407 per 100,000 live births. In order to provide the RCH services to people living in remote areas, where the existing services are underutilized, a scheme for holding camps have been initiated during the year 2001. The scheme is implemented in the 10 weak states and also in the

Eastern States. The report received from the States suggested that the scheme is well appreciated in the Rural Community, and large number of people is attending these camps. According to the information received from different States, 7,283 camps have been organized in the States up to date. As a result of these interventions, a recent survey results of which have come for 50% of the districts indicates that Institutional Delivery has increased from 33.6% (NFHS-II) to 46.9% and Safe Delivery has increased from 42.3% (NFHS-II) to 62.1%. Further, it has increased in NFHS-3 74.4%.

Inequity and Accessibility in Health Facilities: Services and Illness in the Urban Villages of the City

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India has been witnessing fast urbanisation since last decade. The urban population of India, which is approximately 285 million people, is estimated to reach 534 million by 2026. Delhi has a distinct status if we look at the statistics available on the growth of the city. There is a serious demand and supply gap in the existing policy and available health infrastructure even in the newly planned cities in general and urban villages in particular. This paper analyses the inequity and accessibility in health service requirement vis-à-vis the availability of the health services in the new Sub-cities of Delhi (Dwarka, Rohini and Narela). There is a huge supply gap assessing the existing health facilities. Migrants depend heavily on government facilities while non-migrants utilise wider range of health facilities inclusive of government infrastructure. Age of the patients also has consequential treatment outcome where old aged patients give alibi for non-treatment their age while women never prioritise their illness. The paper divulges some of the major policy reviews, which may be considered while planning physical health facilities and understanding people's perspective too. The policy on land acquisition is marred due to the varied agreement and disagreement to purchase and sell land; therefore, sometimes it is difficult for the planners to institutionalise health facilities. Further, decision on the provision of health facilities hangs on several shoulders, especially in mega cities. Equity in quality will lead to equity in accessibility which can be one of the most important parts for balanced urbanisation in India.

Violence Against Women and Health Implications with Reference to Acid Attack Victims

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One of the most serious impediments to women's development is the phenomenon of continuing and increasing violence against them. Needless to say, this constitutes a serious violation of women's human rights especially right to health. Violence against women is one of the most significant, yet little

understood and acknowledged, factors so far as women's right to health is concerned. Gender violence manifests itself in various forms female feticide, infanticide, sexual abuse, incest, molestation, sexual harassment at work and on the streets, marital rape, domestic violence in the form of wife assault, woman battering and acid attack. Culture specific forms of violence against women-like female genital mutilation in some African countries, and harassment/murder/beating for dowry in India also have adverse health implications. So far as acid attack is concerned, it not only violates the physical integrity but also causes scar on the soul of a woman. It completely shatters her confidence to move forward in life deeply affecting her psyche and emotional quotient. Such horrific kinds of violence are also instrumental in the phenomenon of marginalization of women in the development processes. Present paper analyses violence against women and its implications on the body, mind and soul of the acid attack victims.

A Study of Talent Management Strategies on Human Resource for Health of Selected Private Hospitals in NCT of Delhi

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Background: The shortage and the inability to retain efficient health practitioner threatens the adequacy of healthcare delivery. The study is based on the assumption that retention or attrition depend on two inter-linked aspects; one is factors that influence the decision to live or leave for opportunities within nation or abroad, and the extent to which talent management strategy responds to these factors.

Objectives: To study the talent management strategies useful in attracting and retaining talent and identification of factors influencing the attrition and emigration of doctors in selected private hospitals in NCT of Delhi.

Research Methodology: The study used Descriptive Research Design. The tools used were observation check-list, structured and semi structured interview. Primary data was collected from the field and secondary data were obtained through online sources. Case Study method was used for the study. The respondents consisted of doctors, heads of departments and HR representatives. The sample size was kept at 30 and 18 responses were received.

Findings: The study brings to light the cordial work environment, training and development programs, organisation's promptness in making the advance technological medical equipment on time, transparent compensation policy, period of revision and financial incentives, the brand image, autonomy in procedures, and implementation of learning have helped in retention.

Recommendations and Conclusions: The study recommended organisation should conduct opinion surveys at regular intervals and include learning as performance criteria, flexible work schedule, Sabbatical Leave, reimbursements, flexible pay structure, car lease plan, Recreational facilities; gym, holiday packages and improved canteen facility as it may help in further attracting and retaining.

Economic Burden of Maternal Health Care in Empowered Action Group (EAG States) of India

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In the present paper analysis is done in order to examine the economic burden of maternal health care on household and to examine the socio-spatial variation in utilization of private and public health care services. The use of maternal health care is limited in India despite several programmatic efforts for its improvement since the late 1980s. The use of maternal health care is typically patterned on socio-economic and cultural contours. The study uses the 71st round of schedule 25.0 data on Social consumption: health, collected by the National Sample Survey Organisation (NSSO) during January–June 2014. Bivariate analysis was carried out in order to analyse utilization of public, private health facilities for antenatal care, delivery, and post-natal care across socio-economic stratum of rural and urban area. The findings show that household spending mean (Out-of-pocket) on delivery is Rs. 5,969, on antenatal care (ANC) Rs. 2,315 and on post-natal care (PNC) is Rs. 1,758 for EAG states of India and for same study percentage expenditure on maternal health (OOP/HH_EXP)*100) catastrophic is on an average 3% of household expenditure on antenatal care and 2% on postnatal expenditure and 6% on delivery cost which is double of postnatal expenditure and triples on antenatal care. Delivery cost is mutually exclusive, it is not include ANC and PNC expenditure. Along with economic and educational status, type of health care and place of residence emerged as significant factors in explaining estimate of maternal expenditure in EAG states of India.

Worsening of Sex Ratio in Uttar Pradesh: An Inter-District Analysis

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There is growing drum-beating ever since the Census 2011 figures were out that the sex ratio in India is improving. Such is the case with other critically low sex ratio states like Uttar Pradesh. Uttar Pradesh has been suffering from adverse sex ratio against the women although in 2011 the sex ratio in Uttar Pradesh improved to 912 from 898 in 2001. Adverse sex ratio creates imbalances in the society and it leads to economic challenges as well.

A close scrutiny may reveal that this improvement in sex ratio in Uttar Pradesh has been mainly due to ageing population where at the advanced age groups, sex ratio tends to improve for various reasons. However, child sex ratio (CSR) for 0-6 years reveals that it has been getting further adverse in Uttar Pradesh and in its most of the districts in rural and urban areas. Only very few districts show some nominal improvement. For Uttar Pradesh, the CSR declined sharply from 912 in 2001 to 899 in 2011. The decline has been sharper in rural locations than in urban areas. Given this, objective of

the present paper is to analyze the pattern of sex ratio in Uttar Pradesh over last few census periods, while understanding the dynamics in details during 2001 and 2011 among the districts and among the different age groups. Suitable statistical tools would be applied for this work. Likely outcome suggests that the sex ratio is worsening more in the rural areas and in the early age groups across the state of Uttar Pradesh.

Gender Inequality in Opportunities Related to Education, Employment and Nutrition in India

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Under the patriarchal family system, a less than male member status is what women all over the world have experienced. Sustainable development requires gender equality, as a society that is gender unequal is unjust and that which is unjust is unsustainable in the long run. There are many facets to the issue of gender equality in society. For example, the dignity that men and women enjoy as allowed by tradition, customs and as permitted by religion. We have chosen employment, education and nutrition as the three main indicators to reflect opportunities in these three respects enjoyed by men and women in India.

The main objective of this research paper is to assess the extent of opportunities of education (reflected in male and female literacy rate), the extent of opportunities of employment (reflected in male and female work participation rate) and the extent of opportunity of leading a healthy life (reflected in percentage of non-anaemic male and female population). To measure the extent of these opportunities, we have used the prejudice index method. The period of study is post-1991. The prejudice against women in opportunities of education, employment and nutrition shows a declining trend. Nevertheless, it is a fact that there is still strong prejudice against women in the Indian society in the availability of opportunities of education, employment and nutrition. If India wishes to embark on the path of sustainable development, it will not be possible without addressing the inequality in opportunities of education, employment and nutrition among men and women.

Women, Work and Health Problems

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Women spend most of their time working at survival tasks of maintaining the household and at income-generating tasks, both of which are essential to keep family and economy alive. The later tasks for women include a long list of activities, ranging from agricultural produce processing, weaving, spinning, beedi rolling, block printing, soap making, packaging medicines, typing, etc. These tasks

involve low wages, long and erratic working hours, a deplorable working environment has adverse consequences on women's health. In this context an attempt has been made to study the relationship between women work and health problems. The required primary data has been collected from 300 women respondents from Gulbarga district in Hyderabad-Karnataka region. It is found from the study that 49.66 per cent women preferred to visit Government hospitals when they were suffering from the health problems. During illness period 71.00 per cent women do not prefer rest due to burden of work both inside and outside home. Further, it is observed that 47.09 per cent women stated that they have health problems due to long working hours. The majority of women (59.00 per cent) reported that husband takes the decision to visit hospital. This shows that the women working in different fields are affected by various health problems and receive discriminatory treatment during illness.

Janani Surkhsha Yojana and Maternal and Child Health Performance and Challenges

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Janani Surkhsha Yojana or JSY had been started as part of the National Rural Health Mission (NRHM) in India on 12 April, 2005. Under this scheme, all pregnant women, irrespective of age and socio-economic status, are eligible for a cash incentive after delivery in a government or accredited private health facility in 18 high-focus states, including Madhya Pradesh, with low institutional deliveries. The JSY is a key intervention programme that has resulted in phenomenal growth in institutional deliveries. Though the scheme is common for all low performing states, several hurdles occurred in the way of effective implementation and the outcomes are also different. The paper intends to evaluate the trend and progress in the allocation of funds and expenditure incurred towards JSY and its impact on the improvement of the health of mothers and children of the low performing states in India. It also explores the basic hurdles and challenges on the way of effective implementation. The methodology followed for the impact assessment is the database furnished by the NFHS 3 for the year 2005 and Rapid Survey on Children conducted by the Government of India in 2013-14 and also the database of the Ministry Health and Family Welfare. The study reveals the progress of the JSY in improving the maternal health indicators in different low performing states and the push and pull factors affecting the programme and a suitable way forward for the efficient performance in the years to come.

SUHAM: Hospitals by the Poor for the Poor

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DHAN Foundation, with its head quarters in Madurai, is a leading NGO working in 13 states with a total of over 1.5 million members. Currently, it is working through four different approaches. First,

it is the SHG of women, then it is farmers depending on tank-fed irrigation, followed by farmers depending on rain-fed cultivation and finally coastal livelihoods. DHAN promotes its health services through SUHAM Trust by operating hospitals and community-based health programmes. There are three multi-specialty hospitals in Theni, Madurai and Salem in Tamil Nadu. These hospitals are owned by SHG women under the umbrella of Kalanjiam. While professionals from DHAN contribute to management and leadership, women SHG members have grown over the years and are able to contribute to policy making and Board level management of SUHAM. Each hospital has OP clinics, IP beds, laboratory, pharmacy and surgical theatre. Scan facilities, ICUs are being gradually introduced. These three hospitals together saw 39, 978 out patients and 914 inpatients in 2014-15. The financial turnover was over 1 crore. All three hospitals are able to meet their operating costs through their own income. Capital investments are met by both internal income and external grants. It has met the primary goal of making available health services at decreased cost to its members. The challenges faced are in ensuring continued service by doctors. Many of the doctors are service minded. The women who own the hospital live far away and find it difficult to utilize its services.

Inequality in Health Services Utilisation in India: Extending the Effect of Place

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Context: Inequality in the use of health services on racial and ethnic line are complex and multiplicity of studies has demonstrated that variations of utilization behaviour can be related to demographic, social, economic, cultural factors other than racial/ethnic. But, in context of developing countries, mainly in India, ethnic groups are not same as of developed countries like USA or UK. In India, the ethnicity can synonymously be understood by caste/social groups. These social groups are different from each other having differential treatment leads to inequality in health and health services utilization. In India, within the axis of socio-economic and cultural dimensions, ethnicity is studied widely through social/ caste groups, which play significant role in health services utilization. Further, the place of residence may have independent effect on treatment behaviour across the social groups. This can be understood as place effect.

Objective of Study: The study is centred on examining inter-group inequality in seeking treatment in rural India. Second, to model independent effect of place of residence and their linkages with health services utilization in rural India. Data Source IHDS: 2011-12.

Methodology: Other than descriptive statistics for differential in health services utilization, multi-nomial logistic model will be employed to understand causal relationship for using government, private and other health care services. Assuming the independent effect of location will be modelled using multi-level modelling approach at either two or three level. Multi-level model consist fixed part and random effect. Here, random effect is attributable to district at second level and state at third level.

Reproductive Morbidity, Human Capital Support and Underlying Factor of Reproductive Morbidity among Indian Women: An Econometrics Approach

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Background: The menstrual disorder and vaginal discharge are the most common reproductive morbidities among married mothers in rural setting in developing countries, including in India, which influences sexual as well as social life.

Data and Methods: Utilizing the data from two waves of National Family Health Survey (1998-2005) this study investigates nutrition and human capital as a determining factor of RM. The study hypothesizes that better nutritional intake and higher human capital index favours lower RM in India. The factors such as low BMI and low partner's human capital index were utilized to understand the menstrual-related-problem and abnormal-vaginal-discharge among Indian women. The severe problematic menstruation was given higher score as these prevents from day-to-day social meeting and make them partially isolated. Similarly, severe-vaginal-discharge affects sexual life more severe. The simultaneous equation modelling and decomposition techniques were used to justify the objective.

Findings: Higher percentage of women reported problematic menstruation. The women of household sharing their toilet with other households were at increased risk of excessive bleeding. Controlling education among women and equalizing partner's human capital index would be expected to reduce the self-reported reproductive morbidities. Similarly, shifting the low women's partner's human capital distribution to higher counterpart would prove the largest decrease in prevalence of reproductive differential. The illiterate women were at increased risk of prolonged bleeding than their counterparts.

Conclusion: The education, place of residence, high human capital index, and BMI were reportedly significant factors shaping the percentage of reproductive morbidities among ever married women in India.

Exploring Women Knowledge on Danger Signs of Newborn in Southern India

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Early recognition, timely and adequate care of neonatal illness are essential steps towards improving neonatal health and their survival. The objective of this study is to understand the knowledge about newborn danger signs among women in Southern India; and to assess net effect of each variable on knowledge about newborn danger signs. This study used the data from the fourth round of District Level Household Survey, 2012-13, covering a sample of 30, 247 currently married women in the age group of 15-49 years. To estimates net effect of the each variable on likelihood of knowledge on danger signs of newborn; logistic regression model is applied. Nearly one-third (30.9%) of women

are aware of anyone danger signs of newborns in Southern India (Andhra Pradesh: 16.8%; Telangana: 26.4%; Tamil Nadu: 26.4%; Karnataka: 31.9%; Kerala: 66.5%). Non-SC/ST women, those with higher education, those with high standard of living, those who got married after 20 years, women who had full ANC check-up and institutional delivery are significantly more likely to have knowledge on danger signs of newborns. The study suggests that poor awareness of mothers regarding newborn danger signs, there is a need for raising awareness about newborn danger signs and need to enhance education of mothers in antenatal care as well as those mothers discharged from health facilities after delivery. Further, women should have basic awareness of the danger signs of newborn prior to their discharge from heath facilities so that they can easily detect signs and rush their child to healthcare facilities as and when necessary.

Does Quality of Care Matter in Increasing the Prevalence of Contraceptive Use? Response from Bihar

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It is relevant to pay extra attention to contraceptive behaviour of currently married rural women between 15 and 24 years of age, simply because proper knowledge and high prevalence of appropriate use of contraceptive methods may protect this sensitive young age group from evil health-related consequences of early age conception and reduce the unmet need for family planning services. The present study tries to understand how respondents' perception and quality of FP service delivery plays role in unmet need for FP. The qualitative data were collected from five districts of Bihar. In total 20 IDIs with service providers, 10 FGDs with clients and 25 sessions of observations of client-provider Interaction were conducted. The choice of method, provided to the clients was not a very often phenomenon. This coupled with lack of service providers at essential positions and insufficient technical knowledge of the providers, creates the situation even worse. Lack of proper and timely supply was another important issue. Generally, 5-6 clients were attended at a time by a provider. In this situation, the focus to build sustainable usership of FP method has been faded. The data revealed that poor quality of care of FP services may stop or stagger this improvement in FP services in Bihar in near future. This needs urgent and sincere attention from government. Without having good quality of services, the improvement of FP scenario is almost impossible to achieve. Some important implications are delay in lowering the fertility rate, improving maternal and child health, reducing maternal and child mortality in the state.

Maternal and Reproductive Health Care Status among Scheduled Tribes in India: Some Facts from NSS 71st Round Data

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Maternal and Reproductive Health Care has been a big challenge among Indian policy makers from decades. In the path on reducing maternal mortality and achieving universal access to maternal and reproductive health care, India has made extensive efforts but still many women lacking access to maternal and reproductive health care. Maternal health care practices were found to be largely neglected in various tribal groups (Basu, 1993). NSS 71st round data states that about 26 per cent Scheduled Tribes women of age 15-49 years during the last 365 days reported place of delivery/abortion at home and about 28 per cent reported that they have not received any post-natal care. These data indicates that still many women lacking access to maternal and reproductive health care, and this ratio is very high among marginalized group like Scheduled Tribes. The present work tries to explore maternal and reproductive health care status among Scheduled Tribes in India by dividing four major sections. First section elaborate introduction regarding maternal and reproductive health care status in general and among Scheduled Tribes in particular. Second section conceptualizes maternal and reproductive health care status in India. Third section provides some facts related to maternal and reproductive health care status among Scheduled Tribes from NSS 71st round data. And the last section presents discussion, conclusion and some policy implications.

Caregiver Burden among Caregiver of Hospitalized Elderly

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In the present time, caring of hospitalized elderly is a big challenge for caregivers. Care givers of hospitalized elderly experienced many problems during the care giving of elderly in hospital. They always worry about caring of elderly so take all responsibility of elderly. During care giving the care giver started avoid his health, family responsibility, job as well as social interaction with friends, neighbours and relatives. They do not participate in any social gatherings and postpone or cancelled family activities like watching movie, holiday tour, marriage ceremony etc. Sometime they do not celebrate any festival with family or friends because they engage in caring of elderly in hospital.

Aim of the Study: To study the challenges and caregiver burden among caregivers of hospitalized elderly.

Methods and Materials: Descriptive research design was used for this study and 30 care givers of hospitalized elderly from various hospitals in Delhi were selected through purposive sampling technique.

Result and Conclusion: Caregivers of hospitalized elderly face many obstacles in their personal life at the same time as demands of family including child rearing, career along with maintain relationships with friends, neighbours and relatives. Due to care giving, care givers are suffering these types of problems as burden, stress, depression, irritability, aggression and variety of health complications.

Gender Equality and Sustainable Development: Concerns Relating to Health and Sanitation in Mumbai

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Gender equality, women's empowerment and women's rights are inexorably inter-linked with sustainable development. This fact is reflected in various international norms and agreements, including principle 20 of the Rio Declaration on Environment and Development, adopted in 1992. These documents emphasize on the full participation of women in order to achieve sustainable development. The three pillars of sustainable development, namely, economic, environment and social, are relevant to discussions of gender equality. Some scholars suggest that gender equality is the "missing link" of sustainable development. Access to everyday basic and essential needs – water and sanitation, safety and security – has been declared a basic human right and it is essential for achieving gender equality, sustainable development and poverty alleviation. These are required to further enhance women's capabilities, dignity and health. In India, gender sensitivity is seen lacking right from the manner in which the urban infrastructure is planned and has serious consequences for women. The case of Mumbai city reflects that issues relating to gender inequality have not yet been critically addressed. In the context of above, this paper aims to study development and evaluate development in Mumbai vis-à-vis gender. It also attempts to apply gender perspective in designing sustainable development interventions. It suggests alternative pathways that should ideally include social, environmental and economic directions. These alternative visions and values should not emphasize solely on profitability and growth but on sustainability, gender equality, inclusivity and social justice.

Domestic Violence and Daily Consumption of Food Items among Indian Women

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In the Indian context, domestic violence (DV) may be considered as an indicator of patriarchy and female discrimination within a household. It is interesting to explore the relationship between DV and health status among women because the latter is closely connected with anaemia, PPH and MMR. This paper attempts to explore the association between four different types of domestic violence (DV) (less severe physical DV, severe physical DV, emotional DV and sexual DV), and daily consumption of basic food items. Data collected from 93, 089 married women in NFHS-3 are analysed. We found none of the women consumed fruits regularly, while consumption of curd and milk product, pulses and beans and green leafy vegetables were significantly higher among women without any form of domestic violence than among those who faced violence. Multivariate regression analysis of consumption of basic food items indicated that along with standard of living index and caste, all the four types of DV were significantly associated with consumption of milk/curd, legumes/beans, and green leafy vegetables. Thus, this study indicates a strong association of DV with consumption of essential food

items, implying presence of gender discrimination in food. The paper also presents the analysis of consumption of basic food items separately for high focus states of India. All the findings suggest that for improving the reproductive health and achieving the goals of National Health Policy 2015 there is a need to have effective intervention strategies for women empowerment.

Gender Disparities in Morbidities and Healthcare Use among Older Adults in India: A Violation of Human Rights

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The present research study aims to shed light on the changing pattern of Gender disparities in morbidities and healthcare use among older adults in India. The right to health is a fundamental right of every human being leading to enjoyment of the highest attainable standard of health. Health and Human Rights has explicit intrinsic connections and has emerged as powerful concepts. Ageing brings in its fold innumerable problems to the aged, especially women. Older women are more likely to be widowed, poor and suffer vulnerability. The women suffering from chronic ill health and disability are a reflection of the low status of women in society. The source of data will be National Sample Survey Office unit level data for the 71st, 66th and 60th rounds. About 60 per cent of the elderly depend on others for their day-to-day maintenance while less than 20 per cent elderly women and majority of elderly males were economically independent. Amongst the economically dependent, 85 per cent of men and 70 per cent of women were supported by their children. A significant number of elderly, especially females, are confined to home. Overall, morbidity prevalence was significantly greater among single older women compared to single older men with a corresponding gender ratio of 1.13 (p, 0.001). The prevalence of communicable diseases was lower among single older women compared to single older men with a corresponding gender gap of 0.87 (p, 0.001). The prevalence of non-communicable diseases was significantly greater among single older women by 18% (p, 0.001) compared to single older men.

Understanding of Psychosocial Disabilities and Stigma in Leprosy

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Leprosy is the leading cause of permanent disability in the world and is primarily a disease of the poor. Stigma and associated psychosocial problems are common in leprosy and may affect the quality of life. Psychosocial disabilities frequently occur in leprosy because of the chronic nature of disease and the unsightly disfigurement, which results in stigmatization of those affected. Studies carried out in India showed that people with leprosy had more psychiatric problems than the general population,

most commonly depression. Most studies have shown that the stigma of leprosy is aggravated by the physical deformities associated with the disease. Nevertheless, stigma against the disease due to its disfiguring effects causes its victims to be isolated and shunned. The fear of leprosy leads to the stigma and discrimination and is due to lack of understanding and knowledge about leprosy, which increases misconceptions about the disease's transmission and treatment. Some studies have concluded that stigma affects many aspects of the lives of people affected by leprosy including "mobility, interpersonal relationships, marriage, employment, leisure activities, and attendance at social and religious functions" and "the impact of the meaning of the disease may be a greater source of suffering than symptoms of the disease". As per the NLEP report for the year 2014-15, a total of 5,794 grade-II disability detected amongst the new leprosy cases, indicating the grade-II Disability Rate of 4.48/million population. If multi-drug therapy (MDT) is used in the early stages of infection, disability and disfigurement can be avoided.

Responsiveness of Health Outcomes to Health Infrastructure: Evidence from Tamil Nadu and Bihar

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Public health, being the state subject, is primarily the responsibility of states in India. Despite significant growth in health sector in terms of health programmes and policies, health indicators still remain poor in some of the states of the country with large scale variation in health infrastructure. In this paper, thus, an attempt is made to critically examine and provide an estimate of the extent of variation in health infrastructure and its impact on health outcomes in two Indian states, Bihar and Tamil Nadu. The selection of states is based on the socio-economic and demographic achievements of the states. The key question is how far public health system plays an important role in explaining health status of people. Further, we try to measure elasticity of supply of health infrastructure, which essentially measures the responsiveness of health outcomes to improvement in health infrastructure. Data for the study is largely drawn from Census of India, 2011, and Annual Health Survey 2010-11. To measure elasticity of supply of health infrastructure, an infrastructure index using health facilities, average population covered, health personnel, physical infrastructure, and health index using health variables such as IMR, MMR, Under5 mortality and life expectancy, etc., will be constructed. Multivariate technique will be used to understand the impact of health services on health outcomes. The preliminary findings reveal that poor health infrastructure is a significant constraint in achieving the better health outcomes. Thus, like demand side factors, supply side factors do play an important role in health care system.

Health Profile of Select Women in Unorganized Sector

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With over 130 million population, India's 93 per cent workforce is in the unorganized segment, of which half of them are women. Though their contribution towards GDP is well recognised, a large number of them are living in deplorable conditions. The women bear the brunt of disease due to unhygienic environment in which they work and live. It is against this background a study was taken up to explore the living condition of a few women workers in unorganised sector in an urban slum in Coimbatore. The major thrust of the study was to estimate the health care cost, availability and utilisation of health care services and also to assess their perception on health insurance. A survey was conducted, using a structured questionnaire. Around 150 women workers (construction and domestic workers) - 75 from each group were chosen for the current study. The study revealed poverty and disease syndromes due to heavy work load and poor food intake. Women had to shell out for medical expenses from their meagre income, and borrowing money was also a regular practise. Though there is provision of health benefits by the state, it is not been made use by the entire group. Though many were aware of health insurance, many have not enrolled themselves as they were unable to give the premium. However, many are willing to set apart a range of amounts to cover health insurance. The study suggested that health care services need to be strengthened with special emphasis on making these services available at free of cost.

Lessons for Reform in Training of Auxiliary Nurse Midwives (ANMs)

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Auxiliary nurse midwives (ANMs), the lower-most cadre in nursing profession are considered as a pivot for maternal and child health service provision. An exploratory research undertaken during 2014 in Jharkhand aimed at learning lessons for capacity building of ANMs working in public sector with a focus on family planning (FP). With formal approval from the State Government of Jharkhand, systematic needs assessment was undertaken to seek perspectives of various stakeholders about training needs of ANMs. It involved consultations with state health officials and international development partners (n=15), ANMs (n=20) and Community members (n=31). The State implemented FP training programmes for nurses regarding contraceptive methods but comprehensive training with life cycle approach was missing. The functionality of ANM training centres was questionable due to reasons such as lack of tutors. Contraceptive counselling was perceived to be challenging by the ANMs. About half of the ANMs had difficulty in recalling aspects of FP taught to them during their ANM training. Their training also lacked provision of record keeping and managerial skills. A mix of theoretical and practical approach with use of participatory methods was an expressed strategy for further training. Unless there is a systematic evaluation of the training imparted to ANMs, assessment of their

competencies will be impossible and unfair in absence of capacity building efforts and supportive supervision. Learner centric approach and skill development should be the key words for upcoming capacity building initiatives. It is, thus, essential to bring in reform in training techniques and induce a robust evaluation framework.

Gender Inequality and Socio-Economic Differentiation in Knowledge of Sexual and Reproductive Health Matters among Youth in India

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Background: Studies found that sexually transmitted diseases (STDs), unwanted pregnancies, and unsafe abortions are the major sexual and reproductive health (SRH) problems, adolescents are facing today. Therefore, this study tried to investigate the gender differentials and factors influencing the knowledge in SRH matters among adolescents and youth in some Indian states.

Data and Methods: Data for this study has been derived from The Youth in India: Situation and Needs 2006-2007. This study assumed that knowledge of SRH matters would be assessed through four major indicators such as: i) knowledge of legal age at marriage, ii) whether women can get pregnant at very first sexual intercourse, iii) knowledge of at least any one of the modern contraceptions, and iv) comprehensive knowledge of HIV/AIDS. This study used disparity index to measure the gender inequality and three separate logistic regressions have been performed to measure the net effect of background characteristics.

Results: The study found that there is very low level (9.5 per cent) of youth's knowledge in SRH. There is persistent gender inequality in knowledge of SRH which is in the favour of male. Results of logistic regression revealed that age, years of schooling, income of the household, marital status, place of residence, region and family life/sex education are the significant factors of knowledge in SRH matters for male, female and combined although, the odds ratio of categories of independent variables vary according to gender of youth. On the other hand, religion and caste do not have any significant effect on knowledge of SRH in this study.

A Comparative Study of Health Spending in South Asia

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The paper seeks to analyse health spending in Bangladesh, India, Nepal, Pakistan and Sri Lanka with the help of secondary data from 1991 to 2014 collected from World Bank website and South Asian Report. Statistical and econometric methods will be extensively used for the study. It will focus on trend and public health expenditure as a share of GDP and per capita expenditure in South Asian

countries. External resources for health (% of total expenditure on health). The variables like out-of-pocket health expenditure (% of total expenditure on health), private and public health expenditure (% of GDP), will be used for analysis. Despite diversity in their geographical, linguistic, and political structures, Bangladesh, India, Nepal, Pakistan, and Sri Lanka face common health challenges. The health expenditure to GDP is 3.70% in Bangladesh, 3.90% in India, 5.90% in Nepal, 2.50% in Pakistan and 3.70% in Sri Lanka. South Asia has substantial economic investments taking place across the region. However, health expenditure has not reached the same level. The regional aggregate figure for total health expenditure as a percentage of GDP is considerably lower than the global aggregate of 10.07 per cent. The best way to face health challenge in this region is to increase political visibility of health and development. If South Asian Countries do not provide healthcare and basic facilities, they will create a frustrated generation. These countries should create adequate fiscal space for health spending and health security through insurance.

Occupational Health Hazards of Mining Workers: A Study in Chirimiri South Eastern Coal Fields Ltd. (SECL) of "KOREA" District, Chhattisgarh

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Coal mining in India has a long history of commercial exploitation, covering nearly 220 years starting in 1774 with John Sumner and Suetonius Grantheatly of the East India Company in the Raniganj coalfield along the western bank of Damodar river. The mining industry has special features: the work is hazardous and the mining community living in isolation from the rest of the population. The research study is focused on the problems of occupational health hazards of mining workers, their socio-economic problems and their consciousness. Workers faces so many health problems due to presence of high concentration of dust in the workplace, exposure to noxious gases, fumes and hot humid work environment in underground mines, noise and vibration, poor illumination, ergonomically different abnormal positions during work, working in confined space etc. are the various causes of short term and long term health hazards in mines. Hence, a healthy environment is a prerequisite to get rid of their physical and mental stress.

Methodology: This study is an empirical study based on primary and secondary source of data. Here, the researcher has used the descriptive and analytical design for the study.

Findings: From the study, it has been found that mining workers should be provided safety measures and healthy work environment for their contribution in the field.

Employment, Education and Perspective for Make in India

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The demographic and social profile of India presents a unique human resource opportunity for economic growth through employments and GDP sectorial growths. India has a significant proportion of more than 60 per cent persons in the age group of 15-59 years providing an opportunity to rip demographic dividend window in coming decades through bolstering some of the key sectors such as agriculture, 'manufacturing', IT and power industries. The result of regression analysis shows the significant relationship of important determinants such as education levels, vocational training and extended tenure of job contract and industry with the wages used as a proxy indicator for productivity. Therefore, to sustain workers in a long term there is a need to provide them education and health facilities at different level and provide them vocational training with specific skills to acquire job in the industry. This will not only help the workers to sustain but also increases the productivity of industry, which can be a driving force for the growth of manufacturing sector to be a larger base of the Indian economy.

India needs to focus on inviting investments from foreign countries and a focused policy impetus to improve the competitiveness of manufacturing sector, MSME's and incentivize the small scale businesses, which can be a key factor for the success of 'Make in India' and eventually reap the benefit of demographic dividend creating a broad base for employment opportunities to millions of youths.

Personal Income and Gender Dynamics: An Analysis among Indian Elderly

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The linkages between gender dynamics of personal income and economic wellbeing are often been debated especially in the developing country context. This relationship is all the more contested in the case of elderly. It is generally presumed that individuals who earn income are generally better off than those who do not. However, it may not be true in case of elderly especially if the primary source of income come from work. Further, there can also be important gender dimensions in the income and economic wellbeing relationship as the asset ownership and income is generally associated with men. Therefore, the relationship between having personal income and its relationship with financial wellbeing and living standard are rather complex and necessitate in-depth investigation. This paper, therefore, tries to understand the gender dynamics of personal income and its linkages between economic wellbeing among Indian elderly. This paper tries to understand the gender dynamics of personal income and its linkages with economic wellbeing among Indian elderly by using data from the

study on Building Knowledge Base on Ageing in India. The study brings out the dynamics of gender, personal income and economic wellbeing relationship among the Indian elderly. The paper identifies that the having personal means differently for elderly men and women in India. Household economic wellbeing and personal income among elderly men is positively related whereas this relationship is negative in case of women elderly.

Trends of Aging in Bangladesh: Comparison Between Conventional Measure and Kii Measure

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Ageing is the outcome of declining fertility and mortality and is closely related with demographic transition. Decreasing proportion of children and increasing proportion of elderly people in total population can tremendously change age structure contributes ageing process. Various measures have been used to present ageing process. However, conventional and traditional measures exaggerate ageing trend. Such measures do not take into account the entire shape of age structure of population but consider the change of age cohorts. To overcome the shortcomings of the above measures of ageing, Kii's measure is used to take into account the all available age categories of population. In this study, Population and Housing Census 2011 data is used to a better approximation for measuring the degree and trend of ageing in Bangladesh. The result shows that Kii's measure exhibits less degree of ageing speed than conventional ageing indices. Conventional measures have its own cognitive value. The regional variation of ageing process in Bangladesh is also observed. It may conclude that Kii's measure can be considered as one of the best measures of demographic ageing process.

Job Satisfaction among Doctors: An Empirical Analysis

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Research Design: Explanatory research design based on analytical work has been applied. Participant: Sampling units were selected from three districts of Rajasthan state of India, i.e., Jaipur, Ajmer and Bikaner. The sample size of doctors was selected 100 comprising both public and private sectors (50% of each).

Analysis: Factor analysis, one sample t-test, independent t-test and One Way ANOVA were used for testing hypotheses of the study. Job satisfaction was used as dependent variable, different dimensions and sociodemographic variables were considered as independent predictors.

Results: The standard Cronbach's alpha coefficient level ($p>.60$) supported the reliability of the instrument. A significant impact of different dimensions on the level of job satisfaction among doctors was proved at 95% level of significance. The level of job satisfaction varied among doctors in some

particular cases, such as based on gender with respect to employment relationship, based on marital status in terms of job/work itself and career development, based on age group and years of experience in terms of career development opportunities, employee relationship and pay, benefit and rewards. The overall level of job satisfaction was found high among the doctors of government hospitals as the kind of HR policies regularized in terms of salary, benefits, allowances, leave provisions are more compatible in government hospitals of Rajasthan as compared to private.

Health Service Provisioning and Delivery in Conflict Situations: An Analysis of Manipur, India

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Manipur, a state in the North-East Region (NER) of India represents an intricate cultural and ethnic mosaic. Not only is the state geographically isolated and economically underdeveloped, adding more to the complexity in the state is the repeatedly witnessed ethnically motivated conflicts and violence due to the demand of a perceived homeland amongst the indigenous tribal groups and the constant power struggle for domination in the limited resources available in the state, resulting in the state as an area of protracted conflict (Hassan, 2006). In conflict situations, death and lifelong physical injuries, and mental health problems are seen as direct implications but what brings more retractable damage is the institutional failure and the continued non-functional and paralyzed public services system that cannot ensure the basic needs of the people including health needs. The paper examines 'conflict as a social determinant of health (SDH)', an aspect of SDH that has hitherto not been studied in India, and tried to expand and adapt the current framework of conflict as an SDH and beyond that is used by the WHO (Mediterranean Region). Through the paper an attempt has been carried out to develop a more comprehensive understanding of the links between conflict and its implications on health services of Manipur. The case of Manipur is analysed to have a more holistic and inclusive approach that are deeper and entrenched in structural issues, which create condition conducive for diseases and impacts on the health outcome of the people.

Geographical Variation in the Use of Maternal Health Care Services in Maharashtra: Evidence from District Level Household Survey-4 (2012-13)

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Abstract: Antenatal care is one of the components of maternal health care services, it is a systemic supervision of women during pregnancy to monitor the progress of foetal growth and to ascertain in

well-being of the mother and the foetus. The provision of delivery services in the health facility is one of the components of the maternal care; and home delivery under proper hygienic condition with supervision of skilled health professionals is also accounted in safe delivery.

Aims and Objectives: The present study investigates the geographical variation in the use of maternal health care services in Maharashtra.

Data and Methods: Data were extracted from for Maharashtra from District Level Household and Facility Survey-4, 2012-13. A sample of 12,837 married women, who delivered a child during the three years preceding the survey, was considered as unit of analysis. The outcome variables were maternal health care. The analysis included descriptive and spatial visualization, spatial auto-correlation. Descriptive analysis was done to show the use maternal health care services by place of residence and selected background characteristic. In spatial analysis, Moran's I was computed to assess global spatial auto-correlation for a given variable.

Results: The overall Global Moran's spatial auto-correlation index shows significant positive auto-correlation at 5% level of significant in the proportion of use of ANC, institutional delivery and SBA for home delivery. LISA cluster map of spatial clustering and their significance map shows that district with high proportion in the use of maternal health care services surrounded by high value neighbour districts.

An Introduction of Neuroeconomic Models and Their Linkages with Genoeconomics at Micro and Macro Economic Decision Making System

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The decision making process, in almost every field of human activity, has become a complex issue in juxtaposition to the growing technology in the world. The machines though they are sophisticated and advanced in their technologies, ultimately the decisions are to be taken by human brain. The recent studies in human brain functioning indicate that growth and development of a country in all the spheres is highly correlated to the intellectual, education, and cultural parameters. In recent past, the economists started investigating the impact of human brain functions to the economic decisions especially in the areas, such as foreign trade, and domestic, goods and money markets. In this paper, the author endeavours to bring out some interesting discussion encircling human brain as the prime mover of decision making in the arena of economics. 'Neuroeconomics is an inter-disciplinary field that seeks to explain human decision making, the ability to process multiple alternatives and to choose an optimal course of action. It studies how economic behaviour can shape our understanding of the brain, and how neuroscientific discoveries can constrain and guide models of economics'…Center for Neuroeconomics Study at Duke University. Considering the precise definitions of Neuroeconomics and its growing importance, explored by Centre for Neuroeconomics Study at Duke University.

The paper attempts to explore concepts relevant to the micro and macro economic models. Towards exploration of the Neuroeconomics system the paper reviews the various theories of classical and neoclassical economists. The paper believes that, it is pertinent to examine any identity exists between, the Genoeconomics, and Neuroeconomics while one tries to explore the emerging fields of new types of the inter-disciplinary economic theories and concepts. The paper focuses on significant discussion on Paul A. Samuelson's Revealed Preference Hypothesis, and the Input–Output Model of Leonteif which seem to have closer links with the Genoeconomics and Neuroeconomics; an interrelated area of emerging Economic Theories. The paper describes the requirements to carry out the experiments such as Frontal Cortex MRI and its constraints to carry out experiments in countries like India, while the experiments are easily permitted/affordable in developed countries. Other than this, there are loopholes in implementing the sophisticated economic models such as Neuroeconomics and Genoeconomics in developing countries, similar to India. At the most Indian economists may work on the available data structures, which are outdated/published and still hope to derive some meaningful inferences from the Neuro-Geno economic models.

Trends and Issues in Health Expenditure in Maharashtra

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Today Human Development is a crucial indicator and component of economic development. The Human Development Indices (HDI) and ranking has emphasized the availability of adequate education, health and real incomes to the larger part of the population. Hence, skilled human resources are the key to the economic development of the country. All the governments are making efforts to improve their HDI rankings. As a result of which the government of India and the state governments have introduced policies and plans to improve their social sector, particularly health education. This paper deals with the Health and healthcare management in Maharashtra focusing on the expenditure on health aspect. Maharashtra enjoys the place of pride in Indian economy as the industrial and financial capital of the country. In the field of literacy, 2001 Census places Maharashtra second in literacy among major states with 77.3% literacy in the state. In the health indicators Maharashtra has performed well, so far as death rate is concerned.

This paper is structured as follows.

1. Introduction.
2. Trends in Public Expenditure in Maharashtra in Pre-Reform period.
3. Analysis of Health Programmes in Maharashtra.
4. Analysis of Health Facilities and Personnel in Maharashtra.
5. Conclusions – Findings and Suggestions.

The paper finds that the share of health expenditure in the government budget has decelerated sharply over the years particularly in the post-reform period. The health expenditure in Maharashtra declined

from 1% of NSDP (Net State Domestic Product) to 8% in 1990-91 and further to 73% in 2000-01. There has been the introduction of user-charges causing further human deprivation. Under such conditions the worst sufferers are the poor and poorest of poor who cannot avail medical facilities and have to lead lives of disabilities and deprivation or have to give up their lives. The paper provides suggestions to overcome the healthcare resource allocation problems without increasing the budget deficits of the government.

Aspects of Students Health in Ashram Schools: A Case Study of Nandurbar and Dhadgaon Blocks in Maharashtra

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Death of 793 tribal students over the last decade in Maharashtra alone was attributed to negligence by staff in Ashram schools. Snake bites, scorpion bites, fever and illnesses have been cited as the main reasons for these deaths. Parliamentary Standing Committee Report, 2014, has taken special note of this. The committee also observed that sub-standard food and inferior quality personal products were being provided to students in some schools. A PIL in Maharashtra (Nambiar, 2013) had noted that posts of staff meant to ensure good health for students in Ashram Schools remained unfilled even 15 years after the posts were created. With this backdrop, this study has selected Ashram Schools of Nandurbar district as an area of research. The specific rationale behind the selection of this district is that it has substantial number of tribal population and has the lowest Human Development Index. The crystallization of the health and educational status in the selected schools in Nandurbar and Dhadgaon block will give a birds-eye view on the functional nature of ashram school educational scheme with respect to student's health and educational developments.

Prevalence of Health Related Disability and Co-morbidity among Urban Elderly: A Study of Pune City

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Research has shown that health-related conditions and socio-economic factors influence elderly disability. This paper primarily aims to find out the prevalence and pattern of health related disabilities among urban elderly. The data on living arrangement and wellbeing of 950 elderly individuals were collected from representative sample from Pune city. The disability increases with age. About 35% female elderly reported eye impairment versus 34% male elderly. Next disability is in movement: 43% elderly suffers from joint pain, 24% back pain/slip disc and 12% osteoporosis. Females are more

likely to report disability in movement than men. Disability in hearing is reported by 24% elderly. Lifestyle-related diseases blood pressure (44%) and diabetes (24%) are also reported. BP is reported more among females and diabetes more by elderly males. Dental loss is found more in females (41%) than in elderly males (38%). About 9% of elderly reported cardiac problems, 24% female and 16% males reported neurological problems. About 66% women and 63% males have more than three illnesses. Ailing elderly females are relatively more likely to suffer from eye problems, joints-related diseases, and infections. They are somewhat more susceptible to lifestyle, age-related disorders like BP. However, males are more susceptible to diabetes and heart diseases. Risky health behaviour like chewing tobacco, mishri, smoking and alcohol consumption have direct link with ill-health. Of all the respondents, 37.5% males and 25.5% females have some type of addiction. Multiple illnesses place the elderly at risk. The streamlining of the healthcare facilities is a challenge and to initiate measures for geriatric support provision is important

A Study on Mental Health among Rural Women

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Introduction: Good mental health is a sense of wellbeing, confidence, and self-esteem. It enables us to fully enjoy and appreciate other people, cope with day-to-day life and with his/her environment. Mental health problems affect women and men equally. But women are particularly exposed to some of the factors that increase the risk of poor mental health because of the role and status that they typically have in society.

Methodology: The aim of the study was to assess the mental health status (minor mental health problems) among women. The study was descriptive cross sectional. Fifty randomly selected respondents in a village were interviewed using Clinical Interview Schedule-Revised (CSIR) and substance abuse questionnaire developed by World Health Organization (WHO).

Result: The study found that 18% of respondents had sub-threshold psychotic symptoms, 6% had common mental health disorder diagnosable as per ICD 10 criteria, especially in minor mental health problems. About 44% fulfilled the criteria for dependence primarily on tobacco.

Application: The findings clearly describes that there is a need to create health awareness and enhance wellbeing among women especially in rural areas. The policy and social scientists intervention is required in many dimensions.

Conclusion: The study report the major health problems and an increasing in substance abuse among women are directing affecting their mental health.

Keywords: women, common mental health, mental illness, assessment, substance abuse.

Old Age Security in Kerala: Evidence from Living Arrangement of Elderly

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One of the most significant demographic changes of our time is the rapidly expanding number of older people in the world population. The overall reduction in infant mortality rates and the steady increase in the average age at death have resulted in the growth of the elderly population all around the world. The living arrangements of the elderly have changed significantly as a consequence of demographic as well as social and economic changes. Mortality levels, especially of women, have dropped sharply. The conventional living patterns among the elderly have undergone drastic changes following the reduction in fertility and increase in life expectancy. The living arrangement is an important component of the analysis of the welfare of any specific group. Since the elderly are less able to remain independent, they need the care and support of others in several respects. Taking care of the elderly refers usually to emotional support; on the other hand, the support given to the elderly should encompass financial and material support as well. Emotional support is expected from the family or from intimate persons; financial and material support envisages a joint effort of the immediate family and the society. The care and support enjoyed by the elderly are linked to the place of their residence. Thus, living arrangement becomes an important constituent of the overall well-being of the elderly and provides some indication of the level of actual support available to them. Living arrangements for ageing seniors can be confusing to some one who has never approached the subject before. The reason for the confusion is that most old age care and their housing arrangements provide over lapping services among the various categories. Most elderly would prefer to remain in their home of choice as long as possible. Care in the home provided by a spouse or a child is the most common form of long-term care in our country. Most of the studies on ageing concentrated on socio-economic and health aspects of ageing in India, particularly in Kerala, and only a limited studies reported the living arrangements of our elderly. Among the Indian states, Kerala had the highest proportion of elderly according to 2011 census. In 1961, about 5.8 per cent of the total population was in the 60+ age group. The elderly was 10.5 per cent in 2001 and increased to 13 per cent in 2011, compared to the national figure of 8.2 per cent, according to the 2011 Census. The objectives of the study are to examine the determinants of living arrangements among the elderly and to analyze the association of living arrangement with the support getting by the elders. Data of elderly population were taken from "Ageing and its Implications in Kerala" Survey conducted by the Department of Demography in 2013. Bivariate distribution was used to analyze various socio-economic health and other characteristics of the respondents and techniques like Chi-square and logistic regression were used. Results show that, in the changing economic, social and health conditions, the ageing population of kerala will have to face a great challenge in their living circumstances.

Socio-Demographic Profiling of Non-Communicable Disease in India

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In India, Cardiovascular Disease (CVD) accounts for around 1.8 m deaths annually, representing the largest cause of death in both men (20%) and women (17%). Higher incidence and prevalence of both CVD and DM in urban populations is believed to reflect higher prevalence of lifestyle related risk factors, although reports from rural areas of Andhra Pradesh suggest that deaths from CVD in rural regions have become as high as those in urban regions, probably due to reverse migration and transfer of urban lifestyle cultures from urban to rural areas. Moreover, the prevalence of both CVD and diabetes mellitus is higher in lower socio-economic groups as measured by both income and educational achievement. All age groups and all regions are affected by NCDs, which are often associated with older age groups, but evidence shows that 16 million of all deaths attributed to NCDs occur before the age of 70. Of these "premature" deaths, 82% occurred in low and middle-income countries. Children, adults and the elderly are all vulnerable to the risk factors that contribute to NCDs, whether from unhealthy diets, physical inactivity, exposure to tobacco smoke or the effects of the harmful use of alcohol. Purpose of this paper is to make socio-demographic profiling of major NCDs in India using data from the second wave of SAGE study. Prevalence of diabetes (4.9%) was almost double among males (6.6%) compared to females (3.8%). Hypertension was higher among people who have higher education status. The study also found out socio-demographic determinants of some of the major NCDs in India.

Aged Parents' Health and Social Status: A Sociological Study in Gulbarga City

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The elderly people who have promoted the well-being of their families, community and nation. More importantly, they are the parents who have reared, cared and educated for their children. Over the past three decades, a great deal of survey, data has accumulated on living arrangement and supports of the elderly for their social and health status. Traditionally, elderly care has been the responsibility of the family members and was provided within the extended family. In order to understand the health and social status of the aged parents in Gulbarga city of Karnataka have studied and discussed. The traditional norms and values of Indian society lade stress on respect and care for the old people. The aged member of the family was normally taken care of the family itself. But in modern society due to modernization and globalization the attitude of youngsters are more individualistic. Today, old people are no more heads of the families. The respect, acceptance, dignity and love are not their privileges any more. Quite often, the children consider the aged as burden and desire to get rid of them, neglect of old parents is common in present society. In this study, an attempt is made to know with some specific

objectives particularly Health and Social Status of the old aged parents. The study is based on primary data through interview schedule which will be tested with hypothesis; of course, the secondary data from newspaper, journal, thesis is also utilized for information.

A Gender-Based Study on Burns as a Public Health Issue among Women in Bangalore

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Background: Burns has primarily been portrayed as a medical challenge. The gender dimension of this issue has been put forth by women's groups due to its association with domestic violence. Vimochana, an NGO, has been engaged with the burns ward at a state government-run hospital in Bangalore since 1998. A need for a public health analysis of this issue was felt.

Method: A mixed method approach was used.

Data Sources: Burns cases documented by Vimochana between 2000 and 2012 at Victoria Hospital, thesis reports, journal articles and newspapers. Interviews were also conducted with burns care experts and Vimochana staff members. Descriptive analysis of quantitative data, and thematic analysis of qualitative data was performed.

Findings: Number of women who suffered burns was 60% higher than that of men. Also, average Total Body Surface Area involved was 56% for women as compared to 36% for men. Burns cases among women increased at a rate of 28 cases per year, but number of beds has not increased. Of all women admitted, at least 38% cases were of abetted suicide or homicide, and a highly disproportionate number of them had a single girl child. Gaps were found in first-aid of burns patients, financing of burns centres, human resources and quality of care.

Conclusion: Burns is a subject of neglect in all spheres. There is a need for a systematic response to reduce burn incidents and improve medical management through research and community-based action. Efforts are being made in Karnataka towards a burns policy and burns institute.

An Analysis of the Policies and Programmes for Health Development in India

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The paper intends to make a critical analysis of the various policies and programmes undertaken for health development in the state of Odisha. Health is a subject of both the Central and State Governments.

Therefore, the health policies of the Government of India have been highlighted, albeit briefly. The first health policy of the Government of India was in India was in 1983. Thereafter, the national Health Policy 2002 was evolved. The National population Policy 2002 has also focus on short and long term objectives of health development of women and children. The Government of India has also set up various Committees and Commissions at different points of time starting from the Bhore Committee of 1943 to the Srivastava Committee of 1975. The State Government has articulated its commitment to improve the health situation in several policies and programme documents of the Government of Odisha. Some of the recent policies are the Integrated Health Policy 2002, Odisha Vision Document 2010, and so on. These apart, there are a number of state and centrally-sponsored programmes in operation in Odisha. The programmes target at different diseases and areas in the state. All the policies and programmes have found their imprint in the various five-year plans. Finally, it has been concluded that there is no dearth of programmes in the state to control diseases and improve the health condition of people in the state of Odisha.

Menstrual Hygiene and Practice among Adolescent Girls in Raichur District of Karnataka State

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The present study assessed menstruation-related hygienic practices among adolescent girls of Raichur district. The study adopted community-based cross-sectional approach, 428 respondents were selected using a multi-stage stratified random sampling method. This study found that majority of the respondents were using cloth, and less number of respondents were using sanitary pads during menses. Awareness about Shuchi napkin program was good but still need to be improved. Menstrual disorders and restriction imposed during menses were common among respondents. The girls should be educated about the process of menstruation, use of sanitary pads and its proper disposal. Community-based menstrual awareness programs, proper monitoring mechanism of Shuchi napkin program should be enhanced through ASHA workers.

Does Region Matters for Domestic Violence Against Women in India?

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Background and Objectives: It is well known reality that the woman has been treated as second grade citizen for ages across the world. Women are deprived of her independent identity and are looked upon as a commodity. Women are not only robbed of her dignity and pride by way of seduction by the men outside, but also, may become a victim of cruelty by her saviours, within the four walls of her own

house. However since the 1990s, there has been increasing concern about violence against women in both developed and developing countries. Many studies across the world recognized the causes and consequences of domestic violence. The researcher, in the article, tried to explore the impact of region on level of domestic violence based socio-demographic factors across the regions and check for any difference based on region in terms of domestic violence.

Methods: The data for the study was used from National Family Health Survey Round-3 (NFHS-3). In NFHS-3, a module of questions on domestic violence was included as part of the Woman's Questionnaire. Information was collected from 83,703 women aged 15-49 on different forms of violence they experienced.

Results: The study shows one third of women aged 15-49 have reported experience of violence at any time since the age of 15 years, almost one in five of women have experienced violence in the 12 months preceding the survey. Further analysis shows that there is difference in domestic violence across the region based on socio-demographic factors.

Corporate Social Responsibility: Opportunities and Challenges for Health System in India

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The present article tries to understand the level of involvement of firms in Corporate Social Responsibility and review the opportunities to work in health system and challenges faced by firms to work in health system in India. The data for the study was obtained from Karmayog CSR Ratings of Indian companies to understand the level of involvement of firms in CSR, other available articles, books, companies' annual reports and other related publications were reviewed to study the opportunities and challenges in health sector. The study shows that still one-fourth of (largest) companies were not initiated any kind of corporate social responsibility activities. This gives a room for further discussion that the CSR initiation or implementation will be even less among medium scale industries and it will be even less in small scale firms. It was found from two national level corporate social responsibility surveys that the involvement of companies in corporate social responsibility has been increasing in the recent past, that is more so only after 1991. The analysis of opportunities to improve the public health shows that many of the firms in India shown the potentiality of their contribution to improve the health as part of CSR, i.e., TATA Foundation, Reddy's Group, and Satyam contribution to EMRI 108 ambulance is revolution in Indian health sector. However still there are many challenges the government needs to address to streamline the CSR to focus on health sector in India.

Performance of Health Care Expenditure in India: With Special Reference to Southern States

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Health and Education of all human beings are precious assets of the nation. It is nation's moral, legal and constitutional responsibility to promote, restore or maintain the health status of its population through meticulously designed policy, plans and programmes; effectively implementing, monitoring and evaluating them to yield targeted results in respect of health care infrastructure, manpower support, and provision of clean drinking water, sanitation and hygiene, besides a host of other inter-related activities. Health is the fundamental human right. State has the responsibility for the health of its citizens. Health care is more the 'medical care'. It embraces a multitude of the services provided to the individual or community by health personnel aiming at promotion, protection and restoration of the health.

Health is an important determinant of a person's quality of life. So it is a subjective as well as an objective evaluation of the physical, mental and social status. Each year, millions of children and mothers could be saved through improved access to basic health interventions. Development of Health care sector is a great challenge to India. Since this is a vital sector and faces several problems, which include vast population, paucity of resources and non-availability of affordable health care to the poor. Therefore, the present paper is focuses on the performance of health care expenditure in India, in general, and southern states are in particular, are discussed in the full paper.

Gender Equality and Sustainable Development

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Can there be sustainable development without gender equality? Too often sustainable development is still seen primarily as environmental sustainability. This narrow approach oversees some complex social, economic and ecological dimensions without adequately acknowledging gender concerns. The discussions, leading up to the elaboration of a post-2015 development agenda and sustainable development goals, are good opportunities to include a gender perspective in the conceptualization of the term sustainable development.

Achieving gender equity is critical to sustainable development. In all societies, women's and men's roles are socially constructed, but all too frequently gender-based disparities exist that disadvantage women; this impedes their development and, hence, that of humankind.

Despite decades of effort, overall progress in improving women's lives has been inconsistent. Moreover, environmental benefits and burdens affecting human capabilities are inequitably distributed. Women

are still under-represented in all levels of government and other decision-making arenas, whether at work or, for many, at home. Such lack of power is linked to higher levels of female poverty, especially in rural areas of developing countries where women are responsible for 60–80 per cent of food production as well as fuel and water provision yet have little access or control over natural assets such as land, water and ecological conditions that create opportunities for a better life. A sustainable development pathway must be established which has an explicit commitment to gender equality and seeks to enhance women's capabilities, respect and protect their rights and reduce and redistribute their unpaid care work. Women must have full and equal participation in decision making and policy development to create this pathway. This collection of resources provides arguments for a gender perspective in development in order for it to be really sustainable. Are women the key to sustainable development? The three pillars of sustainable development – social, environment and economic – are also relevant to discussions of gender equality. An increasing number of studies indicate that gender inequalities are extracting high economic costs and leading to social inequities and environmental degradation around the world. This paper reviews the findings of the existing body of gender research on the subject.

Traditional Health Care Providers Role among Rural Arundhathiyars of Puducherry District: An Anthropological Study

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The health seeking behaviour depends on the health and illness of the community. Eventually the concept of health seeking behaviour of a community could be studied along with the social network of a community, as it is deeply inter-woven into every event of the social, economical and biological aspects of a population. Health seeking behaviour is an important factor in health management, but this is often ignored while considering schemes for providing health facilities to people. As a result, new schemes for providing health care do not get the desired acceptance of the community, and are, therefore, rendered unsuccessful. At present, some of the decision makers in the health sector are recognizing the need for understanding the health seeking behaviour of the community and its acceptance and usage of traditional and modern methods, as the perception of the community regarding the service delivery. Indigenous systems, especially the more popular, so-called oral traditions, have developed in relatively greater harmony with nature in contrast to the allopathic system, which continues to visualize health as a battle between human beings and nature's predilections. The traditional health practitioners are the people who, in crises, are able to bring reassurance to the patients and his or her family, to create a setting in which not only love and concern but also concerted evidence of a desire for recovery is evident and to instil in the sick person the faith and confidence, which promote healing. This particular study focuses on rural Arundhathiyars, Scheduled Castes. They are concentrated in the districts of Puducherry, Karaikal, and Mahe. This data is collected using anthropological techniques. This paper mainly focuses on the role of the female traditional health care providers in particular and traditional healers in general among rural Arundhathiyars, of Puducherry in anthropological perspective.

Initiation of Breastfeeding Practices in Maharashtra: Evidence from District Level Household Survey-4 (2012-13)

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Introduction: Infant feeding practices have significant effects on health of both mothers and children. The World Health Organization (WHO) recommended that breastfeeding should be initiated immediately after birth and should be continued exclusively upto a minimum of six months of life. Early initiation of breastfeeding within the first hour provides benefits for infant and mother. Colostrum is often considered the baby's first immunization because of its high level of vitamin A, antibodies, and others protective factor. Early imitation ensures that a newborn baby receives colostrum.

Objective: The board objective of the study is to examine practices relating to initiation of breastfeeding immediately within one hour of birth and colostrum feeding to the newborn babies in Maharashtra.

Data and Method: District Level Household Survey-4 (2012-13) Maharashtra data were used for this study. 12, 951 married women who had given live birth during the three years preceding the survey were units of analysis for the present study. Bivariate and multivariate logistic regression model were applied to examine the factors influencing the initiation of breastfeeding.

Results: The study results reveal that educated mother showing significant role in the initiation of breastfeeding. Almost in all districts more than 90 per cent of women were given colostrum/khees within first few days after child birth.

Conclusions: Initiation of breastfeeding does not vary much with delivery place. There is a linear relationship between the household wealth index and feeding breast milk "colostrum/khees" within first few days after child birth.

Socioeconomic Behavioural Problems of the Elderly and Related Health Hazards in Rural Northern India

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This paper aims to study the prevalence of diseases during ageing in different socio-economic and demographic group of society. The study is based on a sample about 267 aged persons (>60 years) collected through a survey entitled "Ageing and Health Conditions in Rural Area". The Socio-behavioural problems have been found to play a significant role in determining the health conditions of the aged people. It is also noted that due to an adverse familial relationship with aged people, many stress-related disorders occur which may result in bad health of elderly. The views and actions of the younger family members towards the elderly members are examined and found to vary according to

sex, work status of the latter. It is noted that elderly females are usually relatively more dependent on their families than their male counterparts.

Seasonal Migration and Substance Abuse among the Youth in India

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Seasonal youth migration is a very common phenomenon in many parts of rural India. Such movement of people is associated with various health risks for migrants, host population and left behind. The present study tries to understand the causes of migration and linkage between migration and risk taking behaviour of migrants. India Human Development Survey (2011-12) data is used for the study. Bi-variate tables were generated to understand the association and multi-variate statistics applied to find out the determinants of the outcome variable. Seasonal migration among youth is comparatively higher among male, married persons, illiterate or less educated and from rural areas in comparison to their counterparts. May be the lack of livelihood during the lean season forces rural youths to venture out to the urban areas in search of some jobs, which leads to various substance abuses. Smoking cigarette, although, is comparatively lesser among the migrants, smoking bidi/hookah and smokeless tobacco is significantly higher among them. Consumption of alcohol was found to be higher among the migrants than their counterparts. As alcohol is available in various price range, even with little income seasonal-migrants can afford to consume it regularly. Even if we control variables like age, marital status, education and place of residence, seasonal migration is one of the most determining factors of substance abuse among the youths in India. Consumption of such substances has pronounced health risk implications; therefore, there is a need to take steps to minimize substance abuse among the migrants through effective plans and policies.

Profile of Cancer Case: A Hospital Based Retrospective Study

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Background: Cancer, which is defined as abnormal growth of cell, can affect any tissue or organ of the body. Cancer is one of the major public health problems worldwide. Prevalence and pattern of cancer is known to vary from region to region. Epidemiological information on cancer including the pattern is an important basis for determining the priorities for cancer control in any population group. These days the world is heading towards various types of non-communicable diseases, which are also known as modern epidemics. Among these modern epidemics cancer is the second commonest cause of mortality in developed countries. In the developing countries cancer is one among the ten commonest cause of mortality.

Objective: Present work is an attempt to study magnitude, profile and some epidemiological aspects in relation to cancer cases at a tertiary care level teaching hospital.

Material and Methods: The present hospital based retrospective study was conducted for the period 1st May, 2016 to 31st May, 2016. Cancer cases diagnosed by all methods or treated during this period were identified from the inpatient registers maintained by the Medical Records Department. All records were studied and analyzed. A total of 422 patients were treated during the period of study. A semi-structured Performa was used to collect data such as age, sex, place of residence, type of cancers and treatment given. The data collected were entered into MS-Excel sheets and analysis was carried out using software SPSS20. The information obtained was tabulated and presented in percentages, and numbers. Significance was calculated using Chi-square test.

Results: A total of 422 cancer patients were treated during 1st May, 2016 to 31st May, 2016. Among them, 237 (56.2%) were females and 185 (43.8%) were males. The study revealed that Breast cancer (74 cases, 17.5%), Lung cancer (17 cases, 4%), Cervical cancer (18 cases, 4.3%), Oral cancer (38 cases, 9%) and 208 cases (49.3%) constitute remaining other cancers. Age and sex distribution revealed maximum number of cancer patients were present between 61 and 70 years (22.3%). In males, majority of cases were present in 61-70 years age group (30.81%) and females majority of cases were seen in 41-50 year age group (23.6%). The study sample revealed 46.9% cancer cases (198 patients) residing in urban areas and 53.1% cases (224 patients) were from rural areas. The main methods of cancer treatment were surgery, chemotherapy and radiotherapy, used alone or in combination.

Conclusion: Tobacco and alcohol related cancers predominated in males. In females, breast cancer predominated over breast cancer. Human behaviour is a major determinant in the successful control of cancer. Understanding cancer magnitude, risk and trends will be of help in cancer control.

Mental and Social Health of Fisherman Community in West Bengal

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Fisherman community is very oldest community in the history of human civilization. They were lived in the river bank from ancient time and basically their occupation was fish hunting and netting. And it is a living unchanged occupation of this community. This traditional occupation is accomplished by some indigenous rules and techniques. But the fishermen communities are not well to do in the socially, economically in the present time. The fisher men communities are included the Malo, Jele, Namasudra, Rajbangshi, Kaibarta and Kwat, who are engaged with this occupation of West Bengal. Naturally, their mental and social health is suffered during a long time. Here author has discussed the present problems and try to solution way with the science developed citing field study.

Accessibility and Uses of Reproductive Health Services: An Analysis of Tribals in Odisha

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Health is a prerequisite for human development and is an essential component for the wellbeing of the mankind. Reproductive health is a condition in which the reproductive process is accomplished in a state of complete physical, mental and social welfare, and is not merely the absence of disease or disorders of the productive process. So, reproductive health care can be defined as the "constellation of methods, techniques and services that contribute to reproductive health problems. It also includes sexual health, the purpose of which is the enhancement of life and personal relations, and not merely counselling and care related to reproduction and sexually transmitted diseases. The numbers of health initiatives have been taken by the Government to assimilate the tribals with other mainstream society, so that new generation will come safely and become healthy. The primitive tribes have distinct health problems, mainly governed by multi-dimensional factors like habitat, difficult terrain, ecologically variable niches and illiteracy. The lives of tribals are still traditional and much more restricted towards change. All these above reasons make them isolated from all kind of new innovations and developmental initiatives. The study dealt with secondary sources of data with an analysis by using historical and descriptive method. Further, the study tried to focus on the following research objectives:

- To find out the status and condition of Reproductive health of tribal women in Odisha
- To access the efficiency of service providers in delivering services
- To analyse the nature and quality of services provided by different agencies like; AWWs, ANMs, TBAs, PHCs, etc.

Treatment Seeking Behaviour of Costal Fisher Folk Women for Reproductive Health Problems in Tamil Nadu

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This paper examines the treatment seeking behaviour of costal fisher folk women for reproductive health problems in Tamil Nadu, and its associated factors covering 400 women in 15-49 years selected from five coastal districts using PPS sampling. Socio-economic and demographic characteristics of women, reproductive health problems (RTI, STI, morbidity and problems during pregnancy, post-delivery and use of contraception, abortion complication, menstruation problem), availability of health facility and knowledge on its services, travel time/cost, visit to health institution, decision maker for treatment and standard of living are considered. Chi-square test and regression analysis are made. Chi-square test of significance confirms that age of women, religion, decision making mostly joint decision and self-decision, accessibility in travel time to health institution, cost of travel and treatment in health

institution, quality of services in health institution and levels of morbidity conditions are significantly associated with the treatment seeking behaviour. Out of 16 independent variables only three variables: morbidity experienced, decision maker for treatment and cost of travel to health institution and treatment are significantly associated with treatment seeking behaviour of women. Women experienced low level of morbidity are more likely to sought treatment compared to women experienced high level of morbidity. Self-decision of women is more likely to sought treatment compared to decision of husband. Low cost of travel to health decision as well as cost of treatment is more likely to improve the health seeking behaviour of women.

Epidemiological Transition in Urban Bihar: An Analysis of MCCD Data

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Analysis of changes in cause of death pattern shed light on epidemiological transition in which infectious and parasitic diseases shift to chronic and degenerative diseases of adulthood. This is important to implement target-oriented public health interventions to further reduce avoidable mortality and disease burden. This study attempts to measure mortality trends by calculating percentage of major causes of death to total deaths by age and sex for urban Bihar by using MCCD data for 2002-2010. Results show that infants have higher deaths from conditions originating in perinatal period (66.6% male, 61.1% female) in 2002, decreased to 59.4% (57% female) in 2010. In 1-4 age male, deaths from infectious diseases, has 41.2% share in 2002, decreased to 30.8% in 2010. In female, circulatory deaths has 42.6% share in 2002 decreased to 16.4% in 2010. Infectious diseases deaths has 33.1% share in male 5-14 age. In female, circulatory deaths share was 34.8% in 2002. In 15-24 and 25-64 age groups, circulatory deaths share has decreased during the period (35% male/25.4% female-2002, 29.3% male/18.7% female-2010 in 15-24 age group; and in 25-64 age group, 36.2% male/30.9% female-2002, 30.5% male/26.8% female-2010). In elder population of 65+, circulatory deaths has 45% share (46.4% female) in 2002, increased to 57.3% (53.1% female) in 2010. Though communicable diseases are decreasing over time they are still prevalent among population of all age groups. Thus, Bihar is in its early stage of epidemiologic transition facing double burden of disease specific mortality. These results also align with findings of other studies in developing countries.

Magnitude of Kala Azar in Bihar: A Case from Madhepura District

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Kala-azar, known as black fever or deadly sickness on the Indian sub-continent, is an ancient parasitic disease that continues to resist modern control efforts. After the initial success, Kala-azar resurged in the 70s and during 1991-92; the Government of India launched a centrally sponsored Kala-azar program. Reducing the annual incidence to less than one case per 100,000 population is aimed, and efforts are channelized under National Health Mission. The aim of this paper is to study the magnitude of Kala-azar in Bihar with a cases study of Madhepura district. Both secondary and primary data were used to achieve the objective. The data on district-wise number of Kala-azar cases and deaths for the period 1997-2013 was obtained from State Health Society, Bihar. Also a community based cross-sectional study was carried out in Madhepura district of Bihar in the month of November 2014. House-listing was conducted in 24 villages of four blocks. The suspected cases were tested with rK39 kit for Kala-azar. The prevalence/incidence rate, case fatality rate and seasonality analysis was carried out. Based on the secondary data, there were 20 Kala-azar cases per lakh population in the year 1997, which rose to 40 in the year 2007, and later declined to 10 cases per lakh population in the year 2013. In 2015, there were 6 cases per lakh population in Bihar indicating that still the target of eradicating the Kala-azar is bit far. Case fatality rate in Bihar was 1.6 in 1997, which increased to 2.3 in 1999, and started declining and reduced to 0.16 in the year 2013. Though the disease occurred across the year, the peak of Kala-azar was observed during the months of March, April and May. Muzafarpur consistently contributed the highest number of cases in Bihar since 1997. In the selected blocks of Madhepura district, the prevalence rate was 420 cases per 100,000 population. Based on screened cases, the incidence rate was 54.7 cases per one lakh population with a confidence interval of 20-90.

Enhancing Equity and Efficiency of Indian Health System: Reviewing some Perennial Questions

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Context of Analysis: The major challenges in service provision in health care are four-fold: improving quality, increasing accountability, controlling costs and promoting equity. These challenges raise several questions: Can government effectively purchase services from the private sector? Can performance and costs in the private and public sectors be properly monitored? Can government further extend coverage of health services to the poor by encouraging and perhaps formalizing pro-poor measures now being provided by the private sector? How will India take on the task of moving from out-of-pocket, fee-for-service financing to risk-pooling mechanisms or public funded systems in a weak regulatory environment? How can public and private health facilities be made more responsive to the

needs of their users? Can user perceptions of providers' manners and skills be incorporated in training and supervision programs to make health providers more responsive?

Mode of Analysis: The analysis is based on a systematic review of literature on these issues and is expected to give broad pointers and not specific solutions.

Possible Responses: The government can purchase some services from the private sector where the cleaning and such operations could be rented out. However, minimum pay and packages for the contracted staff needs to be ensured by the government. All other clinical and associated activities cannot be purchased from the private sector. A strict comparison between public and private health sectors cannot be done due to the fundamental reason of difference in the objective functions governing the sector. While profit drives all actions in the private sector and in the process, in a large number of cases, work against the very principle of health system. Meanwhile, public sector is expected to be oriented towards achieving the goals of the health system. There are limited possibilities of private sector being supported by the public sector. However, the possibilities of encouraging not-for-profit private sector could be given all support to take care of the functioning of public institutions. In situations where we have weak regulatory systems, voluntary payment mechanisms tend to fail the central goals of the health system.

Impact of an Educational Intervention on the Healthy Eating Habits of Adolescents

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Adolescence is a period when peer pressure can affect teenage eating behaviour and they may start skipping meals or possibly under-eating or over-eating. Adolescents are becoming more independent and making many food decisions on their own. Many adolescents experience a growth spurt and an increase in appetite and need healthy foods to meet their growth needs. Adolescents tend to eat more meals away from home than younger children. It was also highlighted often that, lack of awareness about the importance of healthy food habits, wrong food choices, and even lack of awareness among parents are the main reasons for bad eating habits among adolescents. The present study on "Effect of an educational intervention package on the healthy eating habits of adolescents "was undertaken to study the eating habits, physical activity pattern, level of knowledge, attitude and practice and eating behaviour of the adolescents, and also to find out the effect of a multi-media package on their knowledge, attitude and practice on healthy eating habits. Hundred adolescents in the age group of 14-16 years (middle adolescents) studying in the ninth, tenth classes of various schools in Thiruvananthapuram were selected, using stratified random sampling method. Equal consideration was given to both the genders and both government and private schools will be selected. A detailed questionnaire and a food habit inventory were prepared to find out the food habits and dietary pattern of the selected samples. A multi-media kit in the form of a PowerPoint presentation in flash, incorporating short videos was also prepared on creating awareness to adolescents, teachers and parents on the importance of healthy eating during adolescence, and the same was demonstrated to students, teachers and parents with the help of the Parent-Teacher Association (PTA) functioning in the respective schools. A CD kit was distributed

to all the samples (100 numbers) for ensuring adoption of healthy eating practices, as well as to keep it for their future reference. From the study it can be concluded that majority of the samples had poor or low level of knowledge, attitude and practice on the healthy eating habits and its importance. Certain socio-economic variables were found to have significant relation with the level of knowledge, attitude and practice of the samples, like, monthly income of the family and daily meal pattern of the samples.

Keywords: Adolescence, healthy eating habits, educational intervention.

Promoting Indigenous Health Systems: A Case Study of Naturopathy

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Patients are tired of the side effects of allopathic medicines and their exorbitant costs. From this perspective, indigenous medical systems have usefulness. Naturopathy is one of them. Mahatma Gandhi was a passionate follower of naturopathy. In this paper, a humble attempt is made – (i) to understand naturopathy and the philosophy behind it; (ii) to find how effective it is in treating diseases; and (iii) what are the future prospects for this system. Both primary and secondary sources of data are used. The researcher visited the National Institute of Naturopathy (NIN), Pune, used their library and interviewed some of the doctors on the above issues. They enlightened her with some case studies too. Naturopathy is a drugless, non-invasive, rational and evidence-based system of medicine imparting treatments with natural elements based on the theory of vitality, theory of toxaemia, theory of self-healing capacity of the body and the principles of healthy living. It treats a number of diseases. Recently, they have started treating the Cancer and HIV patients too. The results are encouraging. It is observed that the practising allopathic doctors from the established allopathic hospitals like Sassoon Government Hospital and BJ Medical College come to NIN to cure themselves of asthma, back-ache, etc. Naturopathy has not yet got enough attention. Recently, the Maharashtra Government announced that it will set up AYUSH hospitals and colleges across districts to find new drugs and to enable more research avenues. This scenario shows that along with other indigenous medical systems, naturopathy will have a bright future in India.

Tata Steel and Health Care

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Tata Steel is the flagship company of Tata Group and is over one hundred years old. In its long history, its management is inspired by a commitment to return to the society a fair share of benefits, which it gets from it. In the initial years, its corporate social interventions were more of a 'provider' to the society where the community was given support for its overall needs, both for sustenance and

development like distribution of medicines. Gradually, it shifted its approach and began to play the role of an 'enabler', and is now concentrating on building the community's capacity through programmes, engaging it as a partner in project implementation, and helping it link with different agencies at the village level, focusing on providing technical support rather than giving aid. Health is one of its thrust areas. The company provides preventive, promotive and curative health care services through the company's hospitals in Jamshedpur and elsewhere, nine dispensaries in Jamshedpur, public health services, mobile medical vans and health care providers to almost three million people across the states of Jharkhan, Odisha and Chattisgarh. The company is instrumental in the expectant mothers and ante-natal check-ups, apart from the immunization of infants. Tata Main Hospital provides specialized indoor and outdoor care to the community in Jamshedpur as well as caters to the advanced medical needs of the entire Kolhan region of Jharkhand. The company also provided a grant in aid for a nursing school at Jamshedpur to improve the health care services with the introduction of a new ambulance van equipped with emergency kits, medicines, etc. To reduce maternal and child mortality, in 2009, the company became a part of Maternal and Newborn Survival Initiative (MANSI). It is a unique public-private partnership project. In collaboration with the Department of Health and Family Welfare, Government of Jharkhand, it is being implemented in Jharkhand.

Illness and Gender: Understanding Mental Health Issues

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The present paper is a theoretical attempt to examine the consequences of gender on mental health of women. The paper explores the contexts of chronic physical illness and mental illness in order to understand the effect of physical disease and psychiatric diagnosis on mental health of women. Thus, this paper encompasses a large gamut of illness experience of women. To begin with, the paper discusses the issue of social position of women, gender bias and stereotyping against women. The paper argues that the social context of bias and gendered-response is detrimental to mental health of women and that this further enhances the psychological distress of women suffering from chronic illness; both physical and mental. This paper is divided into two parts. The first part deals with the theoretical aspects of the above presented argument, and the second part presents a review of studies that deal with the nature of constraints and distress imposed on women suffering from chronic illness due to their gender status. The paper tries to explore that how women's roles, obligations and identity issues shape the illness experience. The issues related to linkages among illness experience, adaptation and experience of distress are discussed in two chronic illness contexts: Cancer and HIV. Illness perception, coping deficits, guilt, nature of socialization, stress, etc., are discussed in the context of cancer and issues of stigma, morality, violence, lack of social support, quality of life and mental health problems are discussed in the context of women living with HIV. In addition to chronic physical illness, the paper also explores the impact of gender bias on psychiatric diagnosis. For the purpose of this exploration, a review of studies is presented encompassing disorders such as depression, anxiety, eating disorder and diagnostic bias about low income women. The paper concludes with the observation that women face double jeopardy if they suffer from ill health: The impact of illness coupled with mental distress

and issues of lowered well-being. Mental health of women further deteriorates even in the diagnostic domain. This places women in a highly vulnerable and precarious position. Thus, there is a need to view health problems of women in a socially contextualized manner so that caregiving and policy making can be structured accordingly. Lastly, some measures for research and intervention are suggested.

Regulatory Governance and Private Healthcare Facilities: Assessing Health Service Delivery in Nepal

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Healthcare/Clinical governance is a framework, through which healthcare organizations are accountable for continually improving the quality of their services and safeguarding high standards of care by creating an environment in which excellence in clinical care will flourish. It is a framework to make sure that health services are delivered up to the standard or quality that is supposed to be delivered in an appropriate way to all service users. "The Constitution of Nepal, 2015" guarantees basic health as a fundamental human right of the citizens of Nepal. Health service delivery is now being controlled by private hospitals and pharmaceutical companies. Regulatory healthcare governance is very weak. National Health Policy, 1991, opened the door for private sector to play in health. Right to health is threatened now. Health care is being sold at private sectors. The reasons of privatizing healthcare are stagnant governmental spending in health, lack of regulatory governance in private sectors and liberal policies. The research is based on a critical literature review, policy analysis, observations and reflections. The paper discusses the various facets of the notions of regulation, regulatory governance, evaluating regulatory healthcare governance, private healthcare institutions, their strengths and weakness regarding health service delivery in Nepal. The results indicate that due to the inefficient regulatory healthcare governance, the actors and institutions (many of them lack infrastructure, equipment and quality manpower) in private sector to provide healthcare facilities is becoming more profit-oriented than service. Therefore, they are losing trust of the clients in getting effective service at affordable cost.

Community Health Care by Public Sector Banks Under Corporate Social Responsibility

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Corporate Social Responsibility means the responsibility of the corporate entity towards the society, where it is established and developed and supporting the socio-economic system without expecting any monetary benefit. The corporate sector participates in CSR activities through their services towards

environment, community health, education, etc. Public sector banks are also part of corporate sector in our country. Banks are also actively participating in CSR activities. Banks were nationalized in the years 1969 and 1980 to extend the banking services to the poor and weaker sections of the society and for sustainable development. After nationalization of banks, their commitment towards the society also improved. Reserve Bank of India is also directing the banks to participate in CSR activities as enforced by law. The present study tries to find the role of public sector banks in improving community health status in our country through CSR activities, and how far the CSR activities are useful to the society where they are operating. The study shows the role of public sector banks in community health care and interventions adopted through Government and Non-government agencies to improve general health status.

Assessment of Personal Hygiene and Sanitation Using a Composite Index among Adolescent Girls and Their Households in Urban Slums of Pune, Maharashtra

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Background: Improved hygiene and sanitation needs to be prioritized in improving adolescent health. Assessment of hygiene and sanitation would identify adolescent health needs. A tool that provides a composite index, appropriate for assessment in urban slums is essential. The present study aimed to develop a tool and assessed the hygiene and sanitation of slums in Pune from the perspective of adolescent health.

Methods: A tool, comprising of three domains that included drinking water index (DWI), personal hygiene index (PHI) and household hygiene index (HHI), was developed and tested among 60 households. The tool comprised of 13 variables. Observations were repeated after an interval of six weeks. Cronbach's Alpha was used to test the reliability and Inter-class Correlation Coefficient (ICC) was used to assess repeatability of the questionnaire. The tested tool was used to assess the personal hygiene of adolescent girls (n=565) and their household sanitation in nine slums of Pune city, Maharashtra, India. History of acute and chronic infections among adolescent girls was recorded using a structured questionnaire.

Results: Excellent reliability (α =0.9) was obtained for four variables, two observations obtained good (α=0.8) and two scored acceptable (α=0.7) and one scored questionable (α<0.6) reliability. No variance was observed among four variables. Hygiene and sanitation, as per the composite index, revealed an average DWI and PHI (scores ranging between 2 and 3). However, 40% of the households scored the least (between zero and one) in the HHI. History of major infections, specifically malaria was reported among 3% during the last one year prior to the study period, and minor infections were observed among 30%. None of the participants received the biannual deworming intervention.

Conclusion: The composite index developed is valid to assess the hygiene and sanitation of this population. Asssesment of hygeine and sanitation using composite index revealed a poor HHI in Pune

slums and an average DWI and PHI. Measures to improve household hygiene by providing better drainage, and sewage disposal would contribute to integrated approaches in improving adolescent health.

Birth Defects and Ultrasonography during Pregnancy: Looking Beyond Sex-Selective Abortion Issues

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Background: Ultrasonography during the antenatal period is one of the major tools to provide parents an option to prepare and take an informed decision on a birth-defect affected fetus. Due to misuse of this technology, guidelines for the use of ultrasonography during the antenatal period are not yet articulated in the Reproductive and Child Health policy guidelines.

Objective: The objective of this study was to examine the ultrasonography use practices of women who have registered for antenatal care at government hospitals, and the utility of this technology in preventing birth defects.

Methodology: Data on ultrasonograhy usage was available for 891 pregnant women in the Pune Urban Birth Outcomes Study. The cohort was followed till pregnancy outcome occurred and data was collected on (a) number of ultrasound scans, (b) timing of ultrasound scans, and (c) detection of congenital anomalies.

Results: The mean age of the women was 23 ± 4 years, 40% were primigravid, and only 36% were educated more than 10 years. The mean number of scans was 4 ± 1 per woman. Seventy per cent of women underwent a dating scan in the first trimester, but only one-third underwent the anomaly scan during the 18-20 week period. Thirty per cent of anomalies were detected after 20 weeks, and the women had to carry the pregnancy to term. There was a lack of knowledge among the women regarding the purpose of the scan and its technical limitations.

Conclusion: Despite lack of guidelines, ultrasonography is being used primarily for measuring gestational age. There is no counselling support for women who are detected with an anomaly during gestation.

Implications: Need for national guidelines that can ensure the use of this technology without jeopardizing ongoing measures to ensure ethical use of ultrasonography.

Needs of Parents of Children with Disability in Low-Middle and High Income Countries: A Scoping Review

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Background: Childhood disability is a major public health problem in low and middle income countries (LMICs) where disability services are limited. In India, rehabilitative services, and services for education and counselling for parents for the management of disability are rudimentary.

Objective: To compare the needs of parents of children with disabling conditions from high income countries and LMICs.

Methodology: A systematic literature search on parental needs was conducted, using ERIC, Medline, and PubMed databases. Literature was used to describe the available disability services in selected HICs and LMICs.

Results: Disability services in high income countries (HICs) cover a range of services from child screening services, rehabilitation services to residential services for affected children and respite care for parents and caregivers. LMIC services are scattered among different ministries with no inter-sectoral coordination. Regarding parental needs, fifty-seven original articles met the inclusion criteria, of which 15 were from low income countries. Intellectual disability was the most commonly studied condition while visual impairment was the least explored. Reported needs covered five needs domains (information, medical and social service, communication with relatives and health professionals, psychosocial and financial). LMIC studies identified information and financial needs, while families from high income countries had advanced needs, such as respite care centres, specialized schools and parent support groups.

Conclusion: Limited services in LMICs was reflected in reduced parental expectations, and a demand for information, while in HICs there was a demand for services that could further improve the quality of life of children and their parents.

Implications: Analysis of the historical development of disability services, in HICs together with data on the needs of families from LMICs, can be used as a strategy for developing a policy for disability in LMICs.

Development of Indigenous Health Systems and Chronic Diseases in the Metropolitan, Chennai

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Indigenous health systems have framed through the experiences of the people; thus, it has a close relationship with their culture and livelihood. Institutionalization of these systems results in increasing

numbers of health centres in metropolitan cities and the pharmaceutical industries. It also increases the dependency of these systems on laboratories to find and check the recovery status of chronic diseases and on pharmaceutical industries for drugs. Therefore, the medical expenses of chronic diseases are high in all institutionalized health systems due to the routines. However the number of patients seeking treatment in these systems for chronic diseases is steadily increasing in the first metropolitan city (Chennai) of modern India. This paper elucidates the difficulties faced by the people due to the routine medications and reasons to switch from modern to indigenous health system in Chennai.

Domestic Violence and Health Correlates among Women in Coimbatore

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Background: Females of all ages are victims of violence, in part because of their limited social and economic power compared with men. While men also are victims of violence, violence against women is characterized by its high prevalence within the family; its acceptance by society; and its serious, long-term impact on women's health and well-being. Domestic spousal violence against women has far-reaching health implications. Interventions in health settings for intimate partner violence (IPV) are being increasingly recognized as part of a response to addressing this global public health problem. In India, the physical and psychological effects of assaults, burns, battery, rape and other forms of violence, including prenatal sex selection and trafficking of women and girls, have wreaked havoc on women's development and have endangered their lives. However, interventions targeting this sensitive social phenomenon are complex and highly susceptible to context.

Aims: To determine the association of domestic spousal violence with health.

Method: Face-to-face interviews were conducted with 100 women respondents in a household survey in rural and urban slum areas in Coimbatore, India. Purposeful sampling technique was used to obtain female participants with a history of partner violence, aged 15-49 years and selecting equal number (50 each) from rural and urban areas respectively.

Results: Findings indicate a strong association between domestic spousal violence and poor mental and physical health, and underscore the need for appropriate interventions. Women, who are abused, have poorer mental and physical health, more injuries, and a greater need for medical resources than non-abused women.

Social Dimensions of Coping with Type II Diabetes: Study of Select Villages in Kanchipuram District, Tamil Nadu

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Type II diabetes is increasing in India significantly. Currently, there are 67 million people affected with diabetes. It imposes several challenges to the individuals affected, their family and also to the nation. Hence there is a need to study how people cope with it. This study is an ongoing Ph.D. research employs both quantitative and qualitative methods. A cross-sectional survey of all people affected with diabetes in 25 villages and then in-depth interviews among selected participants are conducted. A semi-structured interview schedule is used to collect first level information and an interview guide is used for conducting in-depth study. Presently, the information is collected from 200 participants as part of a first phase survey and completed a few in-depth interviews. Descriptive statistics and thematic analysis will be used to analyse the data. This proposed paper will attempt to capture the process of coping with diabetes at the individual level, family level and the level of health care services. The important focus is to understand everyday management of diabetes and also to dissect the complex interaction between the individual and the family, the individual and health care services in coping with diabetes. The subjective experiences such as perception and experience of symptoms and health seeking behaviour will be narrated. The treatment pattern emphasizing caste and gender disparities in treatment and also family dynamics in everyday management of diabetes will also be examined in capturing the process of coping.

Association of Post-Natal Care with Neonatal Mortality in India: Evidences from DLHS-4 Data

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Introduction: About 0.76 million neonates die every year in India, the highest for any country in the world. Globally, antenatal care (ANC) and postnatal care (PNC) of the newborn is being promoted as a strategy to reduce neonatal deaths. This paper examines the association of PNC and advice given to women about care of neonates with neonatal mortality in India.

Methodology: Used DLHS-4 data (2011-12), 319965 ever married women aged 15-49 years from 21 States/UTs of India were covered. Overall 89876 (96.46%) live births were reported from last pregnancy. Bivariate and multiple logistic regression were used to examine associations between exposure and outcome variables.

Results: Almost 50% of mothers did not receive advices about neonate care. Children whose mothers were not advised for breastfeeding were 1.42 time more likely to die (CI=1.16-1.75, $p<0.001$) than those who received this advice. Crude odds ratio for advice on keeping the neonate warm was 1.43 (CI=1.19-1.71, $p<0.001$), for advice on cleanliness was 1.55 (CI=1.25-1.93, $p<0.001$), for better

nutrition for mother and child was 1.28 (CI=1.04-1.57, p=0.022). Neonates, whose weights were not measured, were 1.63 times (CI=0.94-1.67) more likely to die than those whose weights were measured, though this result was not statistically significant. The odds ratios were not much different when the sociodemographic characteristics were adjusted in the model.

Conclusions: Neonatal mortality were high among those who did not receive advices during ANC for newborn care and PNC check-up for neonates. Though Government of India launched a number of interventions their implementation needs to be strengthened.

Health Care Need for the Migrant Labourers: The Missed Approach

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The migrant labourers share major number in the urban population. Although, they are invisible in the numbers in total population, especially the seasonal migrant labourers, but they are essential part of urban economy, construction industries. These poor unskilled casual labourers migrate into urban places in search of better working opportunities and leave place of their origin for some time. The sole need for their migration is to fulfil their dream of better living conditions. In search of livelihood, they migrate from their comfortable origin place to different and difficult area for living. In this process, the fruit of labour always takes their health at the stake. Migrant labourers not only vulnerable to the occupational health illness but also the long-term physical and mental illness. Brick kilns are generally located at the outskirts of urban places. Brick kiln industry is the seasonal and labour intensive industry, where different types of labour works are done by seasonal migrant labourers. These migrant labourers with their family live in temporary settlements in unhygienic living conditions. The piece-rate wage system forces them to overwork without proper rest. These conditions push the health of migrant labourers into more detrimental conditions, which sometimes become chronic health problems for them. This study would take an insight of construction industry focusing on brick kiln labour economy with understanding of their migrant labourers' health vulnerabilities.

Keywords: urban health, illness, seasonal migrant labourers, health vulnerabilities.

Gender Disparity in Health Care Financing Strategies for Hospitalization in India

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Gender discrimination in health outcomes such as mortality and nutritional status is well documented in the context of India. Contrary to this, very little empirical evidence exists on gender discrimination in

healthcare financing strategies. Using a nationally representative survey, 71st round of NSSO (2014), we examine whether households facing tight resource constraint are more likely to discriminate against females than the households with normal condition. We carried out cross tabulation and multi-nomial logistic model to test our hypothesis. The sources of health financing were categories into a) Current saving, b) Income is assumed to be least onerous, and c) Other scarce sources of finance-borrowing, sell assets such as drought animals, ornaments and other physical assets, help to friends and relatives. The "other scarce sources" are considered as a more scares financial resources implying considerably greater sacrifice and long-term costs. The results show that females are less likely to hospitalized compared to male. When it comes to financing, the gap in the usage of household income and saving favours females, while the probability of hospitalization and usage more onerous financing strategy is substantially higher among males. The probability of males to be hospitalized by financing from borrowing (0.6), sale of assets (1.7), help from friends (0.3 times), etc., much higher than that of male.

Tobacco Use among Males and Females in Maharashtra: Evidence from District Level Household Survey-4 (2012-13)

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Background: Tobacco use in India is characterized by a high prevalence of smoking and smokeless tobacco use, with dual use also contributing a noticeable proportion. In the context of such a high burden of tobacco use, this study examines the regional variations, and socio-economic, demographic and other correlates of smoking, smokeless tobacco and both users of tobacco in Maharashtra, India.

Methods and Findings: We analyzed a cross-sectional, nationally representative sample of individuals from the DLHS-4 Maharashtra (2012–13), which covered 130, 607 individuals aged 15 years and above. The current tobacco use in three forms, namely, smoking only, smokeless tobacco use only, and both smoking and smokeless tobacco use were considered as outcomes variables in this study. Descriptive statistics, cross tabulations and multinomial logistic regression analysis were adopted as analytical tools. Smokeless tobacco use was the major form of tobacco use, followed by smoking and both tobacco users, in Maharashtra. Tobacco use was higher among males, the less educated, the poor, and the rural population in Maharashtra. The prevalence of tobacco use increases rapidly with age among females. Age, education, and region were found to be significant determinants of all forms of tobacco use. Adults from the poor household had significantly higher risk of consuming smokeless tobacco.

Conclusion: This study recommended that the effective government and non-government strategies and plans should be starting to "control tobacco consumption" and nukar natak should be played addressing "How smokeless tobacco affects the health of a person" in all over India starting from Maharashtra, and controlling policies should be implemented.

Comparison of Knowledge, Attitude, Practices about Stroke among the Different Age Groups of Mountainous Area of Ladakh

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Background: Stroke is the third cause of death, worldwide, after cancers and cardiovascular disease. Rising incidence of stroke and higher mortality among Indian population needs focused attention for prevention and early management.

Aims: To assess the knowledge, attitude and practice towards Stroke among different age groups.

Methods: KAP study was conducted in Ladakh using epidemiological surveys, questionnaires regarding the diseases, behavioural responses, stigmas and beliefs were asked to school children, teachers, community paramedical staff, medical personnel and general public in the district.

Results: 1,100 subjects were recruited in the study and were divided into three groups according to their ages, i.e., group A <20 years1 (n=682), group B 21 to 45 years2 (n=341), group C >45 years3 (n=77). M: F 2: 3. The responses were recorded as Yes, No, Don't Know, but, in this, we have calculated only Yes responses. There was significant difference seen between the knowledge, attitude, practices among different age groups (as shown Table 1). In group C only 27.2% subjects were aware of "stroke – as a disease of brain" and about 90.9% of population thought that "stroke is a hereditary".

Conclusion: The results concluded lack of awareness among all the age groups, but in elderly group level of knowledge was very poor and had presumably rampant negative attitude, myths and misconceptions about stroke. Further KAP studies are recommended among different age groups for betterment in the awareness of stroke.

Socioeconomic Inequalities in Smoking Initiation, Intensity, Quit Attempts and Successful Abstinence in India

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Smoking is the most common method to consuming tobacco with about 80% of tobacco use in the form of smoking. Smoking substantially increases the risk of death from lung and other chronic respiratory disease. Smoking is not simply an unhealthy behaviour but considered as deviant behaviour. It is well known that many smokers find it difficult to stop smoking even though they know at an explicit level that smoking is bad for them. This paper aims to understand the prevalence of smoking tobacco across selected socio-demographic backgrounds in India. To carry out this study, Global Adults Tobacco Survey (2009-2010) data have been analyzed. The main dependant variable in analysis is ever smoking, current smoking, quit attempt, quit successful among all males and quit successful among those who ever attempt to quit smoking. A preliminary finding portrays that there is differentials in rural-urban and male-female,

regarding the prevalence of smoking tobacco. However, education and employment status of individuals show large differentials in the prevalence of smoked tobacco. Unemployed males are more likely to be a successful smoking quitter compare to salaried workers. Risk perception also plays an important role in influencing the use of smoked tobacco in India. Incidence of smoking cessation is lowest among males who have no knowledge about risk of smoking. A multivariate analysis shows 65+ age group males, who attempt to quit, are more likely to be a successful smoking quitter (OR=5.6). As conclusion we can say that high prevalence of smoked tobacco among adults population call for targeted interventions.

Menarche to Menopause: Exploring the Journey of the Women of Rural Assam, North-East India

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Menarche and Menopause are two important pillars of reproductive health. Menarche often signals fertility and reproduction in females, whereas menopause marks the end of it. It is a transitional process. Child birth is an important component of reproductive health. Pre-matured delivery, low hemoglobin, unsafe delivery, etc., can put both the mother and child's lives at risk. This paper attempts to understand the journey from menarche to menopause. To study the levels of social support and to explore the role of rituals, taboos and practices related to reproductive health. The study was exploratory in nature. Qualitative approach was used with narrative method for data collection. The study was done in Nalbari district of Assam. Six women from the age group of 40-55 years were selected based on purpose. Heterogeneity based on levels of education, socio-economic profile and accessibility to health services, employment and stages of menopause were considered for the study. Guiding tools were used for the narrative. After recording, the data was transcribed, translated to English and then thematically analyzed. The experiences and memories related to menarche are closely related with the rituals and celebrations. The social expectations with menarche may lead to identity crises. Isolation and secrecy is related to the notion of being polluted during menstruation. Thus, resultant changes in health seeking behaviour. Menopausal health is strongly connected with every aspect of reproduction. The study found significant effects of socio-economic profile and educational qualification on reproductive health across different sections of the society.

Keywords: menarche, menopause, rituals, taboos, cultural practices.

Menstrual Hygiene and Practice among Adolescent Girls in Rural Raichur District of Karnataka

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The present study assessed menstruation-related hygienic practices among adolescent girls of Raichur district. The study adopted community-based cross-sectional approach, 428 respondents were

selected using a multi-stage stratified random sampling method. The study found that majority of the respondents were using cloth, and less number of respondents were using sanitary pads during menses. Awareness about Shuchi napkin program was good but still need to be improved. Menstrual disorders and restriction imposed during menses were common among the respondents. Girls should be educated about the process of menstruation, use of sanitary pads and its proper disposal. Community-based menstrual awareness programs, proper monitoring mechanism of Shuchi napkin program should be enhanced through ASHA workers.

Diarrhoeal Diseases in India: A Statistical Prospective

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Diarrhoea remains a leading cause of mortality among children under 5 years of age, around the world. The burden of Diarrhoeal disease disproportionately affects young children in developing countries like India, who have higher incidence rates due to inadequate water and sanitation and nutritional deficiency. In India, diarrhoea caused more than 130, 000 child deaths in 2013 (Fischer Walker, et al., 2013). This accounts for roughly one-fourth of all global diarrhoea deaths among children under five years, and it has become a global health concern in the last few decades. This paper is a critical study on diarrhoeal diseases through the use of statistical methods, a brief account of diarrhoeal trends in India has been analyzed in this paper. The data has been taken from different national agencies official websites and the Institute for Health Matrix and Evaluation (IHME), etc. The data has been analyzed through statistical tools and fitted the Lognormal distribution for age group and identified that its fitted well for diarrhoeal data, further it shows that it has been declined slightly over a period of time. This study also proposes strategies focused on important measures like healthcare resources, population growth and regional signifies to evaluate prevalence patterns and management of the Diarrhoea locally and globally.

Geographical differentials of Self-reported Morbidity in Kerala

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The morbidity pattern in Kerala has been undergoing major changes. The present study aims to explore the Geographical differentials and determinants of morbidity in Kerala and to examine the variation of determinants across the different geographic dimensions. The present study is based on a survey conducted in 2013, which was funded by UGC, in six districts of Kerala, namely, Thiruvananthapuram, Kollam, Thrissur, Palakkad, Kannur and Wayanad. Bivariate and Logistic regression analysis were used for the study. The Geographical differentials of morbidity in Kerala by different Geographical

dimensions revealed that the prevalence of self-reported morbidity was more in Midland, North zone and Urban areas. In respect of all Geographical dimensions Age, Sex, Caste, Standard of living and Hygienic index are the significant determinants of morbidity in Kerala.

Health Status of Knit-Wear Industry Migrant Workers in Tiruppur City Corporation of Tamil Nadu

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Background: Migration, being one of the major components of population change, will be significant implications on the socio-economic and healthy life of the people. In India, there has been a steady increase in the number of migrants. Whereas, in 1961, there were about 144 million migrants by place of birth, and, in 2001 Census, it was 307 million. In Tamil Nadu, more and more people moved from rural to urban areas in the past 10 years as compared to other states. According to 2011 Census, there are about 4.5 lakh migrant workers in Tirupur City. The work environment in the Knit-wear industry in Tiruppur city is unhealthy for the workers, resulting in several health problems. In view of this, this paper tries to explore the health status of the knit-wear industry migrant workers in Tiruppur City Corporation of Tamil Nadu.

Data and Method: Tiruppur city has been chosen for the present study. A total of 320 households were selected covering 40 (20 males and 20 females) migrant workers engaged in knit-wear industry from eight urban wards.

Results: The result was found that the congested work area, poor ventilation, excessive noise and dust were the major problems faced by which workers suffered and gender, it was back pain among females, and joint pain among males, especially among those who were from within the district. Z-test results imply that women are the most affected group because of lack of adequate support from the family, poor working condition and less care on their own health.

Epidemiological Hazards of Tobacco and Its Manifestations in Oral Health of a Screened Population in Northern India

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The relationship between tobacco consumption and oral mucosal changes and ulceration is not well documented in the literature. The aim of this study is to explore the tobacco consumption and its relationship with mouth ulcers.

Study Design: A cross sectional study.

Methods: Number of cross-sectional health camps through community outreach was organized for the previously unscreened population of the Western Uttar Pradesh and Eastern Rajasthan, India. A total of 8,572 individuals were screened for their common health-related issues. Multivariate logistic regression was used to explore the independent factors related to tobacco use and oral ulceration and mucosal changes.

Results: Study findings showed, mouth ulcers and trismus were common symptoms and tobacco chewing and smoking were common addictions. There were statistically significant associations among the symptoms and addictions as well as predominance in rural populations. The majority of smokers (56.32%) belonged to age ≥45 years, whereas the tobacco chewers (54.87%) and alcohol abusers (58.06%) in the age group 25–45 years. Also the risk of developing mouth ulcers and trismus in this area are approximately 3 (MRR: 2.80, 95% CI: 2.23–3.51) and nearly 6 (MRR: 5.57, 95% CI: 2.46–12.59) times higher, respectively, in males.

Conclusion: A substantial population of the region, more so in young age group, is using tobacco in either form. Despite certain efforts, the prevalence of tobacco use has not yet decreased and requires the attention from all quarters. Effective measures need to be taken to control the tobacco menace in India, urgently.

Changing Urban Environment and Its Impact on Health of Youth People

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The proportion of urban population keeps increasing, not only in India and developing countries but also in most of the developed countries, over the decades. Though the process of urbanization has been considered as one of the indicators of development, the concentration of more population in urban areas causes many demographic, socio-economic, health and infrastructural problems. The youth population is considered most potential human resource for the development of the nation, both in terms of intellectual and labour force perspectives. As the youth segment takes more participation in the rural-urban migration, in terms of education and employment, they are vehemently affected by such problems in urban areas compared to other segments of the population. They happened to have more outside exposure amidst different lifestyles and desired recreational facilities with the help of increasing and innovative electronic and computer-based equipment. The resultant factors such as the changes in the marriage pattern and family system from arranged marriage to love marriage, and from joint family to nuclear family do not lead to healthy environment for the growing young children and youth. The health of the youth is also affected due to different destructive food habits and new lifestyles including time-killing recreational activities. In view of this, this paper makes an attempt to understand the nature of changing urban environment and its impact on health of young people through literature review.

Linkages Between Energy Poverty, Development and Health Inequalities in India

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Household energy consumption performs an important role in human welfare. The association between energy and poverty has well known. India faces serious energy poverty, representing lack of access of clean energy fuels. Energy poverty influences income poverty as poor find it tough to get high priced cleaner fuels. It also adversely impacts the quality of life and household development. The paper deals with three important issues, using primary data collected in rural area of Nashik, Maharashtra; firstly, to analyse relationship between energy as one factor that supports economic development follows poverty reduction and health inequalities among rich and poor in India; secondly, to understand association between energy poverty, women's socio-economic condition and health inequalities; and thirdly, indirect estimate cost and benefit through technology and fuel shift in terms of health improvement. Cross-tabulation, multivariate and multi-nomial logistic regression, as statistical tools, are applied for the analysis to link energy, development and health. The result shows that around 80 per cent of households are energy poor, against 45 per cent that are income poor. Women are more vulnerable than any other family members in the household. If we see the direct cost on morbidity, due to indoor air pollution, is more than switching to clean and improved cook stoves. Policies to decrease energy poverty would include rural electrification; reduce unmet need of modern cooking fuels by supplying affordable fuels and encouraging greater adoption of improved biomass cook stoves.

Pattern of Nutrient Intake and Its Effect on Anaemia and Menstrual Status of Women in India

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Introduction: Anaemia is a major public health problem, worldwide, affecting mostly women in reproductive age group. The main cause of anaemia in India can be attributed to low nutritional intake. Though the prevalence of anaemia has been found to be high among the underweight and the normal women yet prevalence in the overweight group are still high. Women's food habits affect nutrition which, in turn, affects the menstruation. This paper tries to demonstrate a strong link between dietary pattern, BMI level, anaemia and resultant menstrual cycle complications among reproductive women in India.

Data Source and Methodology: The entire analysis has been done using NFHS 3 data. Bivariate analysis, binary logistic regression and multi-nomial logistic regression have been done to establish relationship between dependent and independent variables.

Findings: The results suggest underweight (19.4%) women are more likely to be severely and moderately anemic compared to those who have normal (15.9%) and overweight (9%) women. Irregularity and early menopause is high among the underweight (3.8%, 13.73%) and overweight (3.64%, 16.95%) women. Women, who are anaemic (81.55%), have less regularity compared to non-anaemic women (83.86%). Based on the BMI level, normal women (84.21%) have a regular menstrual cycle compared to underweight (82.47%) and overweight (79.41%) women. Irregularity and menopause is high among the underweight (3.8%, 13.73%) and overweight (3.64%, 16.95%) women.

Conclusion: In conclusion, the study confirms that vital nutrients like protein, calcium and iron have an effect on the occurrence of anaemia which, in turn, has an association with women's menstrual status.

Impact of Out-Migration on Utilization of Maternal Health Care Services: An Analysis of Propensity Score Matching

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Earlier studies suggested that poor performance of the Utilization of Maternal Health Care Services (MCHS) in Bihar due to the economic and cultural barriers. Migration as a social process has the potential to reduce the economic backwardness through remittances and cultural barriers through diffusion to enhance the utilization of MHCS. However, the study examines the impact of out-migration on the use of MHCS. The data collected from 300 migrants and 300 non-migrants for comparison purpose from the rural part of Siwan district, Bihar. To meet the objectives of the study, appropriate bivariate and multivariate techniques were used. The result shows internal migration (90%) compared to international migration. The majority of SC and OBC people have migrated. More than 60 per cent people were migrated due to search for work and after that due to less income from agriculture (25%). Full ANC, PNC within 48 hours and institutional delivery were higher in migrant by socio-economic characteristics compared to non-migrant. The propensity score matching result suggested that Average Exposure Effect (AEE) of migration, full ANC, PNC within 48 hours and institution delivery were 20 per cent, 51 pe rcent, respectively, and 14 per cent significantly higher (with 1% significant level) in the exposed group (migrants) than non-exposed group (non-migrants). Similar result found that for Average Exposure Effect on exposed (AEEE). For instance, full ANC (20%), PNC (49%) and institutional delivery (16%) significantly higher (with 1% significant level) in the exposed group than non-exposed group. However, the study suggested that there is a significant effect of migration on utilization of MHCS.

Pattern of Residential Segregation in India and Its Linkages with Adult Mortality: A District Level Analysis

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India's caste system has long been cited as a source of inequality and spatial segregation. However, with recent changes in its economic/cultural environment, it is assumed that the dominance of caste on segregation pattern has been replaced by socio-economic status. It is a known fact that residential segregation creates conditions inimical to health and mortality. Yet, no attempt has been made to explore the relationship between residential segregation and mortality inequality in India. Using data from 2011 Census we calculate levels of residential segregation. Mortality rates for Indian districts are not available hence mortality estimates have been generated by fitting two dimensional flexible mortality models. The spatial analysis reveals a clear geographical patterning in the distribution of values. Analysis found that mortality rate is low for low segregated areas. It is evident that even in 21st century residential segregation by caste is sizably larger than the level of segregation by socio-economic status.

Does Epidemiology of Age-Pattern of Outpatient Rate Changing in India? An Exploration from National Sample Survey

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Demographic transition and epidemiological transition have altered the age pattern of mortality and morbidity globally and nationally. While evidences suggests that India is facing 'triple burden of diseases' (with high morbidity of communicable, non-communicable diseases and injuries), the social, economic and human loss due to the changing disease pattern is profound, which is affecting economic growth and development of the country. Thus, the aim of this paper is to examine the epidemiological transition and its impact on changing age-pattern of outpatient rate in India. Data from three rounds of National Sample Survey (52nd 1995-96; 60th 2004-05 and 71st 2014) have been used for the study. The outpatient is defined as patient who visits the health facility for treatment without staying overnight. The outpatient rate is defined as the number of outpatients per 100,000 population during the last 15 days, prior to the survey. India showed an increasing pattern in outpatient rate from 4,754 in 1995 to 8,069 in 2004-05 to 10,577 in 2014. Outpatient rate due to communicable diseases, NCDs, injuries and other diseases in all the age groups had increased over time but in varying degrees. The infants were most likely to experience outpatient visit for communicable diseases; 70-79 years age group was most likely to undergo outpatient for NCDs while 20-29 age group experienced the most likelihood for injuries. Though the catastrophic and impoverishment effect of out-of-pocket health expenditure was out of purview of this study, but many poor families are pushed into poverty due to high treatment cost.

Economic Burden of Diabetic Patients in India: A Review

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The Indian diabetic population is predicted to reach more than 80 million by the year 2030. It indicates that immediate health policy restructuring and investment will be needed if the best use is to be made of scarce health care resources with accompanying economic constraints. The costs of treatment of diabetes exist among the patients of all socio-economic groups. The significant financial strain which households, particularly the poor, face in treating diabetes is alarming. A recent study showed that, in India, the total annual expenditure by patients on diabetes care was, on average, Rs. 10, 000 in urban areas and Rs. 6, 260 in rural areas. The studies related to diabetes indicate that the direct and indirect cost implications of diabetes are multi-fold, worldwide. The direct costs are related to the medical and non-medical cost of people with diabetes, mostly the burden on individual and at the family level. The indirect costs are related to the society and government, which are associated to loss of productivity. The review also finds that the annual direct and indirect medical costs per patient increase with the number of microvascular and macrovascular complications. A study in India, during the years 2008 and 2009, found that total costs for patients without complications were Rs. 4,493 compared to Rs. 14,692 for patients with complications. The review reveals that it is imperative to work effectively towards implementing a holistic programme for diabetes prevention and reduce diabetic expenditure burden in the community.

Solid Fuel Use and Child Health in India

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One half of the world population, and up to 95 per cent in poor, low and middle income countries, including India, use solid fuels to meet their energy needs till date. In developing countries, especially in rural areas, 2.5 billion people rely on biomass, such as firewood, charcoal, agricultural waste and animal dung, to meet their energy needs. In India biomass fuels are also an important source of cooking fuels for most of the rural and also in urban households. Indoor air pollution is considered to be a significant source of public health hazard, particularly to the poor and vulnerable women. Main purpose of the study is to analyze the different types of cooking fuel with respect to the place of residence. In addition, the study also explored the connection between polluting fuel use for cooking and heating with childhood morbidity, i.e., acute respiratory infections (ARI). Third round of National Family Health Survey (NFHS-3) is used to carry out the study. In order to fulfil the study objective bivariate method has been applied. Findings suggest that the chances of using solid fuel varied widely across the place of residence and also shown a high correlation between solid fuel use and higher incidence of respiratory illness. The findings also confirmed a gradual shift from solid fuel to clean fuel which, in turn, reduces the ARI prevalence.

Determinants of Pregnancy Outcome among Economically Active and Non-Active Women

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Women's reproductive health is a complex issue that occurs at the interface of cultural attitudes, prejudices and modern technology. Now a days, women are more involve in economic activity which make them more empower than ever. There are significantly differences in lifestyle of working and non-working women, which may be effect the health and pregnancy outcome. The main aim of this study is to investigate the determinants of pregnancy outcome such as live birth, spontaneous abortion and induced abortion among working and non-working women. Data from District Level Health Survey (DLHS-4), India, was used. Bi-variate and multivariate analysis has been done to fulfil the objectives. Findings suggest that age, duration of marriage, household economic status, caste and religion are significant determinants of pregnancy outcome among both working and non-working women. For instance, the prevalence of spontaneous and induced abortion is high among working women than the non-working women. The prevalence of spontaneous abortion is 9% among rich non-working women, whereas it is 11% among rich working women. Literacy is another significant determinant of pregnancy outcome. The prevalence of both spontaneous and induced abortion is high among educated working women than the educated not working women. Spontaneous abortion is significantly high among working women from OBCs and other castes than their counterparts, it is 12% for both the groups. Interestingly, both spontaneous and induced abortion is high in higher ages among working and non-working women, but it is slightly high among working women.

Increasing Caesarean Births in the United States: Literature Reviews on Reasons, Implications and Recommendations

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Giving childbirth is an important and interesting obligation and reproductive right of a woman or a couple in the family and society. The mothers, except working and healthy ones, in the olden days happened to experience more deaths due to various health and pregnancy complications, less advancement of medical technology and restricted legal procedures. In the modern scientific era, the caesarean technology has been gifted by the medical scientists to save the mothers and babies irrespective of the nature and type of pregnancy complications. A caesarean delivery is a surgical procedure in which a fetus is delivered through an incision in the mother's abdomen and uterus, whereas the natural childbirth is a childbirth without routine medical interventions, particularly anaesthesia. The natural childbirth arose in opposition to the techno-medical model of childbirth that has recently gained popularity in industrialized societies. The caesarean births have increased mostly among all women

irrespective of their socio-economic and geographic characteristics. The National US Caesarean Section statistics shows an alarming increase of caesarean births. When first measured in 1965, the national U.S. caesarean birth rate was 4.5%. However, the national caesarean rate has increased seven-fold. It peaked in 2009 at 32.9% and had dropped slightly, to 32.2%, in 2014. About one mother in three now gives birth by caesarean section. This paper tries to review some relevant literatures for understanding the concept of caesarean birth, reasons for its increase in recent times, especially in the United States, its future implications and recommendations for its reductions and increase of natural birth.

How Maternal Well-being and Child Temperament Defining Nutritional Status of Children

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Although, economically, India may well be shining to the world at large, but when it comes to health, particularly child health picture is far from glossy. Despite of remarkable growth in GDP and economy for the country in the last decade, the rate of malnutrition has been consistently high. Some of the recent studies suggest that other than socio-demographic characteristics there have been other factors which are causing malnutrition among children. In this context this study aims at understanding the reason of child under nutrition, through maternal well-being and child temperament. The study has been conducted in a district of Gujarat as it is one of the developed states of India, and still the problem of malnutrition persists. Primary data has been used to carry out the analysis through descriptive and multivariate statistical techniques, and indices have been formed to comprehend more clearer situation. Maternal well-being encompasses of several different components like physical, social and mental well-being. Child temperament has been computed by using Child behaviour questionnaire (Rothbart, Ahadi and Hershey, 2001). To compute the nutritional status of children the weight and height of the children have been taken. The preliminary findings found that 33 per cent of women were found in the higher side of maternal well-being index that there is a direct relationship between the level of maternal well-being and nutritional status of children. Majorly, temperament of child is affected by well-being of mother like activity, positivity, impulsivity, low intensity, sadness, and others. It is clearly visible that activity, anger and sadness are negatively associated with nutritional status of children.

Low-Back Trouble and Its Associated Factors among Male Tannery Workers of Kanpur

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Musculoskeletal symptoms are very common among the workers engaged in most of the occupation worldwide. Concerns were raised about the possibility of a high prevalence of musculoskeletal

symptoms in male tannery workers. The aim of this was to estimate the prevalence and determinants of low-back trouble of male tannery workers. Data for the present paper was obtained from a cross-sectional household study of tannery and non-tannery, which was conducted during the period of January–June, 2015. The study was part of Ph.D. program and was conducted in the Jajmau area of Kanpur city in the state of Uttar Pradesh, India. Mean age of tannery workers was 38 years (SD=1.42). About 66 per cent of the tannery workers were illiterate and only 11 per cent had a high school education or higher. Average tannery work experience was 18 years. Results from the logistic regression analysis for low-back trouble shows that the age was significantly associated with low-back trouble in the age group of 25-35 years (OR=3.63**, $p<0.05$) and >36 (OR=4.16***, $p<0.001$). Odds ratio also shown the statistically significant association with the type of work they usually done that were wet finishing (OR=2.37*, $p<0.10$), dry finishing (OR=3.45**, $p<0.05$) and miscellaneous work (OR=3.09**, $p<0.05$). Loading and unloading of raw hides manually 57 per cent more likely to have low back trouble, which shows the statistically significant association.

Understanding the Factors Determining Congnitive Abilities of Children in India

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India has high disparities in income levels and corresponding food intake differentials among its population. While women population is strongly affected by anaemia, child population suffers from very high level of malnutrition. Poverty is an important factor in the poor nutrition situation, but nutritional deficiencies are widespread even in households that are economically well off. The factors explaining cognitive skills of children impacted by several socio-economic factors, biodemographic and household conditions, and school factors remain unexplored at larger extent in India. This study tries to fulfil this objective. Using Indian Human Development survey data (2nd round, 2011-12), the focus of the present study is to analyse the linkages between cognitive skill of children of 8-11 years of age and their bio-demographic factors, socio-economic factors, school characteristics and family environment given the education status of their mothers. Results indicate the positive and significant impact of nutrition on cognition functioning of children, which has favourable policy responses for the Government of India to strengthen the educational achievements in India through Sarva Shiksha Abhiyan (SSA) and Mid Day Meal Scheme (MDM). Not only socio-economic characteristics but also school characteristics influence the cognitive function of children. Private schools seem to have higher impact on cognition functioning as compared to government schools. Similarly, the significant impact of household environment on cognitive function of children is being observed in this study.

Does Gender Difference Exist in Type and Place of Health Care Utilization for Short-term and Long-term Morbidities? Exploration from Indian Human Development Survey-II

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Background: The study has been undertaken in the area of gender and health with the view point of gender differences, their vulnerability to specific diseases and utilization of type and place of health care utilization. Gender differential among males and females are observed on the grounds of different background characteristics and also on India level among all states of India.

Data and Methodology: The data from India Human Development Survey-II (IHDS-II) 2011-12 has been used for study. Analysis has been done by using bivariate and multivariate analysis (multinomial logistic analysis).

Results: Results demonstrate that males have the higher percentage of visiting government health care facility for the treatment of long-term morbidity like cataract (25%), cancer (39%), heart disease (24%), asthma (24%), etc., compared to females (23%, 25%, 25%, 19%, respectively), whereas females prefer to visit private health care facility for the treatment of long-term morbidity. Females are less likely to visit health care services in other district/town than within village compared to males. Comparing the results for gender differentials in short-term morbidity shows that both male (75.54%, 73.3%, 75.46%) and female (74.94%, 73.75%, 75%) prefer to visit private health care facility for treatment compared to government and other health care centre.

Recommendation: There is a need of more women centric policies which would empower them and help them to get better and unbiased health care facilities.

Keywords: Gender differential, type of health care, place of health care, long-term morbidity, short-term morbidity, India.

Awareness and Socio-Demographic Determinants of Maternal Health Care Services Utilization among Reproductive Women in North-East India

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World Health Organization estimates that more than half a million women lose their lives in the process of reproduction, worldwide, every year and most of these mortalities are avoidable if mothers have access to maternal health care services. The paper tries to examine the awareness and socio-

demographic determinants of maternal health care service utilization among reproductive women (15-44 years) in North-East India by using DLHS (2007-2008) and univariate, bivariate, logistic regressions methods. The study focuses on currently married women of the age group of 15-44, who have at least one live birth in three years, preceding the survey. Finding shows that even though if women have heard or seen of ANC programs some of them did not receive ANC or did not go for ANC check-ups. The study also suggests that there is a strong influence of socio-demographic factors on mother's utilization of maternal health care services in North-East India. Women with higher education from richer households are more likely to go for health care services compared to women who are having less education from poorer households. More efforts should be given to educate the mothers to strengthen the community participation and to increase the accessibility of maternal health care services, providing accurate information about the services in the health institutions.

Geographical Variation in Prevalence of Non-Communicable Diseases (NCDs) and Its Correlates in India: Evidence from Recent NSSO Survey

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This study examines geographical variation in prevalence of NCDs and its correlates in India. Data was taken from NSSO-71st round, and bivariate analysis was used to estimate geographical prevalence of NCDs and Chi-square test was adopted to test significance. The multiple logistic regression analysis was used to check the impact of different correlates on NCDs. The overall prevalence of NCDs reported by the respondent is 55 people (per thousand), and it varies across the geographical regions of India. The southern part of the country shows highest incidence of NCDs, i.e., 107 people (per thousand) as compared to other areas of the country. The prevalence of NCDs was varying with the socio-demographic characteristics of individuals. We found that older people with 60+ years have highest prevalence of NCDs throughout all areas of the country. The Incidence of NCDs was high among urban residence, female, ever-married women, other ethnicities, and other religion across all regions of the country. The predominance of NCDs was highest among affluent families rather than their counterpart categories across regions of the country. As accepted, the problem associated with health is increased with advanced ages. The age, sex, place of residence, ethnicity, religion, and income status of respondent was significantly associated with NCDs. Overall, the study pointed out that there is a need to develop proper surveillance and monitoring program which focus on highly affected geographical areas to arrest the growing burden of NCDs.

Situation of Water and Sanitation and Health Outcomes in India

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A safe, reliable, affordable and easily accessible water supply is essential for good health. Numerous diseases are spread by water, waste and inadequate hygiene including via vectors. The main objective of water, sanitation and hygiene programmes in disasters is to reduce faeco-oral transmission of diseases and exposure to disease-bearing vectors. Women and children who must find their water risk, their health and time taken away from school and other productive activities. The data source for this study used from National Sample Survey Office (NSSO), Socio-Economic Survey, 69th Round: July 2012-December 2012, Schedule 1.2: Drinking water, Sanitation, Hygiene and Household condition. Sample Size N = 95,548. The importance of good quality of water and sanitation practices as well as access to the needed quantity of water and its easy availability of help in elimination of various vector borne diseases. It also improves the quality of life led by the population. In Indian context, as observed from the data, the study can come to the conclusion that the practice of sanitation is very low in prevailing development scenario. The access to good quality of water in most of the states is poor and which, in turn, may contribute to higher morbidity and mortality. Improvements in the water and sanitation practices as well as delivery mechanism of good quality of water will benefit the population and reduce disease burden.

How Vulnerable is the Indian Middle Class to Poverty Due to Rising Health Care Expenditures?

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The mean out-of-pocket expenses on health care have risen over the decades in India, along with an increase in mean incomes of households. The situation of real incomes of majority of the Indian population, especially of those at the bottom quantiles have not changed, rather worsened. India is thought to be experiencing a transformation to a middle class society. A closer examination tells that this 'middle class' community is for the most part simply computations of the size of different strata of consumers. However, within this limited frame, they are actually a small fraction of people having consumption levels higher than poverty lines, but are nevertheless exposed and vulnerable to economic shocks. In the current paper, we try to define middle class based on relative terms, i.e., based on consumption expenditure data. The middle-most quintile group is taken to be the middle class. It attempts to see how vulnerable the 'middle class' households are using the methodology proposed by the World Bank, proposed by Wagstaff and O Donnell. It uses the poverty line estimates given by the Planning Commission, based on 2011-12 Consumption Expenditure Survey of National Sample Survey Organization, adjusted by cumulative inflation rates and were inflated to 2014 prices. The study also uses multi-nomial logit regression to test the correlates of households above the poverty line

that fall below the poverty line due to health payments, and households that, despite health payments, remain above the poverty line. Both are compared with households above the poverty line that do not have any health payments.

Gender Differences in Morbidity Pattern of Elderly in India

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This study sheds light on the pattern and trend of chronic diseases among the elderly over time using three sources of data - NSSO 60th round (2004), WHO-SAGE (2007) and LASI (2010). On the basis of ICD-10, the diseases are been classified into three categories – communicable diseases, non-communicable diseases and other diseases and disabilities. Trends in prevalence of diseases under these three broad classifications by sex, age groups and residence are estimated and analyzed. A decomposition method has been used, to check the significant difference in the gender gaps in the prevalence of morbidity. Non-communicable, and other diseases and disabilities are found to have increase over time regardless of background characteristics of individuals, whereas it is the reverse case for communicable diseases and the prevalence of diseases are higher among elderly females than the males. The gender differentials in prevalence of diseases are found to be statistically significant. The concluding message of the study is that morbidities among the elderly are expected to escalate in future.

Assessing the Exposure of Street Sweeping and Potential Risk Factors for Developing Musculoskeletal Disorders and Disabilities: A Cross-Sectional Case-Control Study

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The study aims to assess the exposure of street sweeping occupation leads to development of musculoskeletal disorders (MSDs) and related disabilities. A cross-sectional case-control design was adopted, 180 street sweepers were selected as control group from six municipal wards. A modified standardised Nordic questionnaire was applied to measure MSDs and disabilities. The impact of the occupation of sweeping on developing MSDs and disabilities was assessed using the propensity score matching method. In addition, a multivariate logistic regression model was employed to identify individual risk factors. The prevalence of MSDs was found to be significantly higher among sweepers for shoulder (32%), wrist/hand (29%), elbow (27%) and neck (17%) compared to the control group (11%, 19%, 9%, and 11%, respectively). Similarly, disabilities among street sweepers were significantly

higher for lower back (27%), upper back (27%), wrist/hand (26%), shoulder (24%), elbow (23%) and hip/thigh (17%) compared to the control group (18%, 19%, 13%, 9%, 6%, and 8%, respectively). PSM method highlighted that the sweeping occupation raised risk of developing MSDs as well as disabilities particularly for shoulder (17-16%), wrist/hand (14% each), elbow (13% each), and upper back (12-13%), respectively. After the workers' age and their BMIs were adjusted, years of engagement in street sweeping and their location of work emerged as potential individual risk factors for developing MSDs and, thereby, disabilities. The study concluded that the occupation of street sweeping raises the risk of MSDs and musculoskeletal disabilities. Individual risk factors increase the risk of developing MSDs as well as musculoskeletal disabilities.

Study of Mechanism of Injury in Trauma Patients in India

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Introduction: Each year almost five million people die as a result of trauma, more than the total number of deaths from HIV/AIDS, tuberculosis, malaria and maternal conditions combined. In low-middle income countries, situation is more challenging than developed countries due to limited infrastructure and resources and other related factors.

Aims and Objectives: To study the mechanism of injury in the trauma patients.

Settings: Towards Improved Trauma Care Outcomes (TITCO) registry database collected from our city medical college hospitals in India.

Methods: TITCO was prospective observational trauma registry collected by trained data collector, at four government hospitals in India. Patients with isolated limb injury and brought dead cases were excluded. Mechanism of injury was classified as primary variable along with age group and gender. Logistic regression was used to calculate odds of different mechanisms of injury. Trauma effects on gender, paediatric, adult and geriatric age group was evaluated.

Results: Among 16,047 patients of TITCO registry 22.37% were fatal. No significant difference seen among genders (odds: 1.24), while compared to paediatric, adult and geriatric were at higher risk with odds of 2.138 and 3.882 respectively. Compared to assault cases fatality of falls, RTA, Railway accident and burn were higher with estimated odds of 2.062, 2.765, 5.532 and 8.229, respectively.

Conclusion: This study documents the mechanism of injury among trauma cases in Indian city hospitals. Adult and geriatric population was seen at higher risk of trauma-related threats. Burn, railway accident and RTA are among most fatal trauma documented by this study. Railway accidents accounted higher fatality than RTA.

Study of Time to Reach Hospital and Mode of Transport Used by Trauma Patients in India

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Background: Early hospitalization (golden hour) of trauma patients is important to increases the probability of survival. Mode of transport is an important factor for trauma patient to reach hospital.

Objective: To study the time elapsed between injuries to reach hospital and mode of transport used in trauma patients.

Settings: Towards Improved Trauma Care Outcomes (TITCO) registry collected from four city medical college hospitals in India.

Methods: TITCO database was collected by prospective observational methods by trained data collectors. We consider distribution of time elapsed between injury to reach hospital and mode of transport as primary variables. Life status is compared with primary variables. Logistic regression analysis was performed by considering mode of transport and time elapsed as an independent variable.

Results: Among 16,047 trauma patients, 27% reached within three hours of injury, while 44% reached in 4 to 24 hours of injury. In overall trauma registry, majority of cases reached hospital by ambulance (67%), followed by taxi/auto (12%), private car (11%) and police/others (10%). While among direct transfer cases ambulance was used by 22%, taxi/auto by 35%, police brought 23% and 20% by others. Compared to private vehicles odds for taxi/auto, ambulance, police transfers and others were 1.157, 2.204, 2.63 and 2.953 respectively.

Conclusion: Among direct transfers cases limited use of ambulance is seen, which needs to be enhanced for safety. In lieu of ambulance, private vehicles and taxi/auto are appeared as lifesaving options.

Deferential and Associated Factors of Low Birth Weights in Selected High and Low Fertility States in India

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Low birth weight, defined as newborns weighing less than 2500 grams, is an important indicator of infant health because of close relationship between birth weight of baby and infant morbidity and mortality (acc. to WHO). Low birth weight at birth is either the result of pre-term births or of restricted foetal growth. It is closely associated with neonatal mortality and morbidity, cognitive development, but chronic disease in later life of child also. Infants weighing less than 2, 500 g are approximately 20 times more likely to die than heavier babies, and contribute to a range of poor health outcomes.

It is more common in developing than developed countries. It examines the LBW in high and low fertility states of India using data from the nationally representative surveys of NFHS-1 conducted during 1992-93, NFHS-2 conducted during 1998-99 and NFHS-3 undertaken in 2005-2006, which is global standard for systematically monitoring and nationally representative household survey. Bi-variate and multivariate analysis have been used in the present study. The analysis shows that there is a huge difference of LBW between high and low fertility states. Mother health indicators such as BMI and Anaemia level, maternal care such as ANC and maternal characteristic; Women age at birth, Birth order and birth interval are strongly associated with low birth weight of babies in both high and low fertility states. Background characteristics of women shows the strong association with low birth weight of babies, as the level of education of women increase the occurrence of low birth weight continue to get decreases.

Socio-economic Determents and Mental Status of Farmers in Maharashtra: A Case Study from Vidarbha

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Farmers are subject to a number of unique occupational stressors, many of which have been aggravated in recent last few years by changes in farming practice, climate change such as drought, heavy rain, and hailstone and by economic factors. These are probably part of the explanation for farmers experience, one of the highest rates of suicide of any industry and there is growing evidence that those involved in farming are at higher risk of developing mental health problems. The research examining mental health issues experienced by farming and socio-economic condition. The analysis is based on the primary data collected involving 300 interviews with farmers who are cultivated land in four locations across Yavatmal district in Maharashtra. Bi-variate and simple linear Regression analysis has been carried out to examine the prevalence of mental health among farmers by socio-economic and demographic indicators. Factor analysis is used to assess the extent of mental health in farmers. The value of KOM is higher than 0.92 and Bartlett's Test is significant ($P<.001$). This analysis suggested that the items of the GHQ-28 were reliable as having high internal consistency. Using GHQ-28 questionnaire scale as referred the farmer's mental problem as follow (34.8%) somatic symptoms (55.2%), anxiety and insomnia (7.4%), social dysfunction and (24.7%) severe depression. Health professionals, government agencies and non-governmental organizations need to be recognized and be aware of the increasing occupational stresses faced by farmers and the effects of these on their mental health and, in particular, their mortality through suicide.

Sexual and Reproductive Health Outcomes and Its Determinants: A Study among Scheduled Castes

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Major United Nations conferences and summits, in September 2000, commitment was made by the nations to a new global partnership to setting out a series of time-bound targets - with a deadline of 2015 - that have become known as the Millennium Development Goals. Goal 5th refers to improving the maternal health. According to the National Family Health Survey-3, the likelihood of receiving any type of Antenatal care is lowest among women belonging to SC. Only 18% of the births among these women are conducted at a health facility, compared to 51% among women who do not belong to SC and ST, or any OBC. These results are supported by state-level studies. A study conducted in Karnataka by Karnataka Health Promotion Trust (KHPT) showed that women belonging to SC or ST were less likely to obtain ANC, more likely to deliver at home, and less likely to be assisted by a skilled birth attendant and less likely to receive postnatal check-up. A study from KHPT looking at pregnancy-related deaths using verbal autopsies found that although only 37% of the women from the study sample belonged to the SC and ST, as much as 74% of the maternal deaths occurred among women belonging to these groups. Similarly, use of family planning methods for birth spacing and/ or limiting family size is also lower among the SCs women. To achieve health equity and health care service utilization by the poor SC population, particularly by women and children, through innovative insurance and government assurance schemes and social security plans.

Role and Impact of Social Capital on Health and Well-being of Older Adult in India

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With demographic transition and increasing longevity, there are more than 103 million older live in India (Census, 2011). Increasing life expectancy gives not only more life years but also some health problems as well. So in recent time, impact of social capital on health among elderly has drawn much attention. Using SAGE India (Study of Global Ageing and Adults Health) wave 1 (2007-08) data, we investigate the role and impact of social capital on health outcomes, mainly: self-rated good health, depression symptoms and physical inactivity among older adults in India. Measures included socio-demographic characteristics, health variables and physical activity. Social capital was assessed with six components, namely: marital status, social action, sociability, trust and solidarity, safety, and civic engagement. The social capital analysis reveals that self-rated health is decreasing among older people with their increasing age, where they face more depression and physical inactivity in their old age. Older women and illiterate persons have a high level of depression and physically inactive.

As the finding of analysis shows that sociability, trust, and solidarity have an adverse impact on the depressive symptoms and physical inactivity of older people. The health and well-being of older adults are also positively affected by the level of social activity. Sociability and level of trust have a much negative impact on depressive symptoms, where older people find themselves much healthier in a safe environment. To conclude, implementation of social capital agenda must account for the socio-demographic context of the focus population, in this case, Indian elders.

NREGA Implementation to Employment and Wage Rates in Uttar Pradesh, India

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A majority of people in India live in villages and about 50 per cent of the villages have very poor socio-economic conditions. Since the dawn of independence, concerted efforts have been made to uplift the living standards of rural masses. Rural development as an integrated concept of growth and poverty elimination has been a paramount concern in all the consequent Five-Year plans. The NREGA is an important step towards realisation of the right to work. It is expected to enhance people's livelihood security on a sustained basis, by developing economic and social infrastructure in rural areas. Using unit level data from IHDS, the paper seeks to examine employment and wage rate in Uttar Pradesh, India. The study found that the lack of trained professionals for time-bound implementation, under staffing and delay in administration, lack of people's planning, poor quality of works and assets created, inappropriate schedules of rates, unnecessary bureaucratic interventions and mockery of social audits were hindering the implementation process, which need to be implemented. Effective levels of awareness and sustained public pressure are crucial to ensure that the implementation problems are addressed and the objectives met.

Occupational Exposure and Economic Loss Caused by the Work-related Diseases in India

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Occupational exposure and work-related diseases are the major health issues, especially CVDs, cancer, T.B., stroke hypertension, etc., that affect the economic growth and overall development in India. The estimated economic burden caused by these diseases range from 5-6% of GDP and among these diseases CVDs account for the highest share of total health expenditure (15%). The objective is to explore the relationship between occupational exposure and economic loss caused by the related diseases. Data has been using from IHDS-2005 for establishing the relationship; and for the analysis purpose logistic regression was used. The result shows that cataract and T.B. are more and cancer is

less prevalent diseases in all occupations. CVDs was the highest found in white-collar worker (5.7%), whereas cataract, T.B. and mental illness found in construction worker 10.2%, 8.84%, and 4.19%, respectively. Cancer was profoundly affected to transport and retail services while less in construction and blue-collar worker. The total mean wage loss by occupation was Rs. 322 per day that is higher when compare to other paid worker. By these diseases, more mean wage loss per day in urban areas compare to rural areas. A little attention is paid in this sector, so much awareness is needed to promote the healthy life for economic development.

Child Care Practices among the Tribal Population of Gadchiroli, Maharashtra

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Every year four million babies die in the first month of life, and a quarter of these take place in India. Childbirth and the neonatal period are culturally important times, during which there is strong adherence to traditional practices among Tribes in India. Many harmful traditional practices are prevalent among the Tribes. In this study, efforts are made to understand the traditional and cultural practices during and after childbirth among Gond and Madiya tribes of Maharashtra. The study based on the field survey conducted in tribal-dominated rural Gadchiroli district in Maharashtra. The study uses both qualitative and quantitative methods for data collection. Ten in-depth interviews carried out with the dais (Midwives), ASHAs, elderly women in the community and mothers-in-law of recently delivered women in the villages. A sample of 386 men interviewed whose wives were given birth in the last two years. Findings show that potentially harmful newborn care practices are being carried out in the study area. Half of the women delivered at their homes. More than half of women said that they initiated the breastfeeding after one day of birth in home deliveries. Nearly 30% of women said they have given a bath to babies immediately after birth. Nearly one-third of infants were given breast milk after 24 hours of birth. Recently delivered women also not allowed to have regular food intake after the childbirth; the women herself have to prepare food. Some practices also observed such as isolating women and baby after delivery; women and infants have to sleep on the floor.

Parental Perceptions on Son Preference: A Qualitative Study in a Slum Community in Chennai

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Son preference refers to an attitude found on the belief that girls are inadequate and of lesser value than boys. As a major form of gender discrimination, it can give way to an array of practices harmful to girls and women. Son preference has been found to be the primary cause for increasing the unwanted fertility

level of any country or region. The nature and levels of son preference depends upon the different values of children that the parents attach on male children and female children resulted through traditional believes and practices of the society in which they are living. The existence or level of son preference differs among communities of villages, towns/cities and slums based on their socio-economic and cultural characteristics. The parents from patrilocal and patrilineal systems of families are found to attach positive values to sons rather than daughters. Some studies reveal that the old age support, setting funeral pyre after death of parents, escaping from dowry problem are the main reasons for having male children. This study makes an attempt to understand the perceptions of parents on sons as compared to daughters through 15 case studies in a slum community of Chennai, having daughters only, sons only and both children using information collected through both in-depth interviews and focus group discussions.

Uniformed Side Effects of Modern Contraceptive Use in India

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Increasing contraceptive use in developing countries has reduced the number of maternal deaths by merely reducing the number of unintended pregnancies and high risk pregnancies especially among women of high parities. In India, use of both temporary and permanent modern contraceptive is increasing but yet women are less aware about the side effects of using such method and often shy to speak about in the society. The objective of this study is to assess currently married women who experienced side effects associated with using modern contraceptive use based on DLHS 4 (2012-13) data. Statistical techniques like Bivariate and multivariate were used. Result found out Himachal Pradesh and Goa reporting the highest and lowest modern contraceptive use, among the methods, condom use was found highest. Side effects of using IUD was reported highest and the most common reason of side effect was weakness and inability to work, 12% of Pills and injectable users reported not satisfied by using the method and only 15% women were informed about the side effects of the method by the provider. In spite of high percentage of women using modern contraceptive method still women were not informed about the side effects of using such method, it is the concern on the part of the provider to aware the pros and cons of using modern contraceptive method so as to reduce health risk arising from modern contraceptive use, therefore policy should be made in such a way that users are also aware about the other side of the coin.

Effect of Six-Minute Walk Test (6MWT) on Pulmonary Function among School Going Children in Puducherry

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Six-Minute Walk Test (6MWT) is a simple, reliable and applicable test that reduces the incidence of pulmonary complications. The aim of the study is to explore the effect of 6MWT on pulmonary

function among school going children in Puducherry. An exploratory study was carried out among 724 school children aged 10-12 years in three different Government urban schools of Puducherry. Children who did not have any episode of respiratory discomforts during the past three months were included in the study. Six-minute walk test was directed according to the standardized protocol of AST guidelines. The potential factors including height, weight, BMI, PEFR, oxygen saturation (SpO2) and pulse rate were measured using standard prescribed methods and tools. The difference in mean percentages of variables between pre- and post-test values were assessed by using paired t-test. Among 724 samples, 370 (51.1%) were boys and 324 (48.9%) were girls. Mean anthropometric parameters include age (11.06 ± 0.7 years.); height (137.4±8.02 cms); weight (30.7±7.1 kgs); body mass index (16.3±9.7) and chest circumference (25.2±7.5 inches), respectively. The mean PEFR measurement before exercise is 325.1 ± 66.8 L/min while after exercise is 355.4 ± 68.1 L/min. Mean oxygen saturation at baseline and after 6MWT was 96-99%. Pulse rate increased from 88.5±19.2 bpm at baseline from maximum after exercise 117.8±24.3 bpm. The overall statistical analysis showed significant ($P<0.005$) improvement in pulmonary function by using peak flow meter and pulse oximeter. Pulmonary function test is a valuable tool for evaluating the respiratory system.

Nomogram of Peak Expiratory Flow Rate among School Going Children in Puducherry and Karaikal

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Peak expiratory flow rate (PEFR) is an effort-dependent parameter emerging from the large airways within 100-120 m/sec of the start of forced expiration. The equation evolved from the selected population data will assist in monitoring the lung function of a growing child over the time. The objective of the study is to construct a nomogram with respect to PEFR among school going children in Puducherry and Karaikal. A cross-sectional study was carried out among 400 school going children from both Puducherry and Karaikal by adhering proportionate stratified random sampling method. Stadiometer and weighing scale was used for anthropometric measurements like height and weight. PEFR was measured using Mini-Wright Peak Flow Meter. Linear regressing analysis was used to formulate PEFR nomogram. The mean PEFR value of boys in Puducherry (282.9±44.3 L/min) was significantly higher than those in Karaikal (256.1±62.7 L/min). Similarly, the mean peak expiratory flow rate value of Puducherry girls (267.03±53.3 L/min) was significantly higher than girls of Karaikal (174.6±31.2 L/min). The regression equation for PEFR based on height among children in Puducherry was PEFR = 3.73 × height in cms – 268.80 (for every 1 cm increase in height, PEFR increases by 3.73 L/min) and PEFR = 3.41× height in cms – 285.13 (for every 1 cm increase in height, PEFR increases by 3.41 L/min) for children in Karaikal. Finding of the study revealed that regional difference is an important determinant of lung function. Therefore, it would be more appropriate for each region to generate its own reference value.

The Process of Preparing Decentralized Health Plans Under National Health Mission in Gadchiroli District of Maharashtra: How it is being done? Is it genuinely participatory?

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Decentralized health planning is one of the important initiatives of the National Rural Health Mission, aimed at improving community participation in the implementation of health services. Towards this, every year, health plans, i.e., Programme Implementation Plan (PIP) are generated at different levels with the intention of ensuring preparation of PIP in a participatory manner taking people's health needs into account, instead of health budgets being prepared by state and national level experts. However, experiences from the process of Community-Based Monitoring and Planning (CBMP) of health in Maharashtra suggest that this is not being done as envisaged. This study, therefore, investigated how the process of preparing PIP from the village to the district level is actually being undertaken. This study was conducted in two blocks of Gadchiroli district, namely Armori and Kurkheda, where the CBMP process is in place since 2007. Qualitative data was gathered, conducting in-depth interviews of total 33 participants which included ANMs, Medical officers, district level health officials, various committee members, etc., who were involved in PIP preparation process for the year 2013-14. Data were analysed thematically. Findings of the study indicate various gaps in the PIP preparation process in the context of PIP formats, capacity building, nature and depth of community participation and its approval. It emerges that there was no co-ordination between the government officials and committees at various levels. People's participation in the process was minimal. Hence, certain policy level changes are essential in the current process of PIP preparation to attain the main objective of decentralized health planning.

The Prevalence of Mental Disability in India: An Analysis from Census of India

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The burden of mental disability continues to grow with significant impacts on health, human rights and major socio-economic consequences in the world. WHO estimated that every one in four people in the world will be affected by mental disorders at some point of their lives, and the mental disorders are the leading cause of disability and ill-health worldwide. In India, the Population Census refers mentally disabled as including mentally retarded and insane persons. The community care approach has been used in the latest phase in terms of the development of mental health service in India. The mental disability can be caused by any conditions which impair the development of the brain before or during birth or early childhood. The study entails the prevalence of mental disability and other. For the fulfilment of the objectives of this study, the various tables of C-series of the Census of India

2011 has been used. To analyse the age wise mental disability among male and female the data has adjusted to come nearby the accurate estimation. The result of this study suggests that the share of the female disabled population is higher than male among the total disabled population. The prevalence of mental disability is higher in Schedule Tribe population than any other social group. In the age group of 20-29 and 30-39 have the higher prevalence of mental disability than any other age group among ST population.

Dysmenorrhoea Problem of Adolescent Girls in Cuddalore District, Tamil Nadu, India

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Adolescence is a transition period from childhood to adulthood and is characterized by a spurt in physical, endocrinol, emotional, and mental growth with a change from complete dependence to relative independence. One of the major physiological changes that takes place in adolescent girls is the on set of menarche, which is often associated with problems of irregular menstrual, excessive bleeding, and dysmenorrhoea of these, dysmenorrhoea is the most common of gynaecologic complaint. The study was conducted in rural and urban areas of Cuddalore district, Tamil Nadu. 600 adolescent girls have studied in the age group of 10-19 years, chosen by using systematic random sampling method. Data was collected by personal interviews. Analysis was done using SPSS version 12. The proportion in dysmenorrhoeal categories is comparatively high in urban areas indicating higher prevalence rate of dysmenorrhoeal among the urban respondents. Between married and unmarried categories both in rural and urban areas, unmarried respondents have comparatively high prevalence rate of dysmenorrhoeal, Chi-square test results have established a strong association between prevalence of dysmenorrhoeal and place of residence and marital status of the respondents.

Health Problems and Coping Strategies of Aged Persons in Tamil Nadu

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The population faces number of problems due to insufficient income to support themselves and their partners. The aged population suffer from ill health, societal failure and unhealthy living arrangements. In particular, the needs and problems of the aged population vary according to age, gender, social and economic status. Of these, health problem is the major issue that highly affects the aged population. In this situation, the aged population adopt different coping strategies to manage their health problems. Given this, the present study analyses the health problems of the aged and coping strategies they adopt. For this, the study has chosen Coimbatore district in Tamil Nadu (13.51), where old age dependency is high. The problem of aged differs between the rural and urban regions and between economically independent, partially dependent and fully dependent. As a result, stratified random sampling method

is adopted to identify 40 males and 40 females of aged populations in each category of economically independent, partially dependent and fully dependent, 240 aged respondents are surveyed. From the study, it is found that the aged population face health problems of joint pain, diabetics, breathing problem and heart disease. The aged population report that low personal income and lack of family support have led them to struggle to meet their needs. To overcome this, the aged population have adopted few coping strategies such as consulting government hospitals, spend from their past savings and borrowing from others. Thus, the study suggests health card and special wards for aged population in government hospitals for safeguarding the aged population.

Elderly Females, the Most Deprived among the Deprived: An Examination of BKPAI, 2011 Data for Tamil Nadu and Kerala

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Elderly persons, in general, are deprived group in general population, whereas the elderly females are more deprived than males. With this background, in this paper, an attempt is made to analyse and examine how far the latter contention is supported by data collected (as part of BKPAI, 2011 survey) from 1444 and 1365 elderly persons belonged to Tamil Nadu and Kerala states, respectively. Simple percentages, cross-tabular analysis and Chi-square test statistics are adopted so as to compare the selected demographic, socio-economic and health related indicators of the elderly across their gender and state background. Results highlight that elderly females reported to be slightly younger than males in Tamil Nadu, whereas the reverse pattern is well noted in the case of Kerala. Sex ratio is uniformly more favourable to females, irrespective of their age group; more pronounced in Kerala than in Tamil Nadu. Socio-economically, with a few exceptions, in both the states, elderly females are at disadvantage side (than elderly males) in terms of higher share of widowhood/divorced, illiterates or having little education, working, lower annual incomes, owning of land/plot, economic dependency status and co-residing with children, which are also found to be highly significant. On the health front – ADL status, IADL status, disability status and self-reported health status, also elderly females appear to be highly deprived than their male counterparts, irrespective of their state background. Detailed discussion of these findings and suitable policy implications are provided in the paper.

Migrants and Their Socio-economic, Health Characteristics and Quality of Life: A Study with Reference to Migrants in Tiruppur City, Tamil Nadu

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Migration, being one of the major components of population change, became an inevitable event in every body's life throughout the world. The process of migration has been motivated through industrialization,

urbanization globalization and modernization. Migration has both advantages and disadvantages. The advantages may be search and finding variety of employment opportunities in urban areas; more individual's freedom to have wide exposure on various aspects of life to think and act accordingly; to mix with cross-culture people and learn their languages and positive lifestyles; to develop integrated and wholesome personality development by utilizing the communication, transportation, computer facilities for the growth in education and health aspects of life. The disadvantages of migration may be ignoring the traditional occupation in the mother-village; break down of joint-family system which was the base for socialization of family life and community integration; problems of women, children and elderly who mostly happen to be left at villages; detachment of hometown, language, culture and immovable properties like house and land. This study makes an attempt to study the socio-economic, and health characteristics and quality of life of migrants in Tiruppur City, Tamil Nadu, with the help of data collected from 320 households. The basic results reveal that the workers worked for 12 hours normally; they used common bathroom; and the duration of stay was found to be positively associated with income.

The Mother Matters: A Gender Perspective on Factors Associated with Maternal Morbidity in Rural India

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Although there exists substantial research on the determinants of maternal care utilization in India, research on the crucial issue of maternal morbidity remains rare. Using a sample of 8, 949 rural women, who were usual residents and had at least one live birth during the last five years, from the third round of the National Family Health Survey 2005-06, the present study is an attempt to address the gap, with special emphasis on the role of women's autonomy as it shapes maternal morbidity in rural India. The dependent variable – maternal morbidity – refers to women who have experienced haemorrhage and/ or puerperal (childbed) fever for their last birth. We adopt a modification of the framework developed by McCarthy and Maine (1992) to analyze effects of sociodemographic, economic, cultural variables and those pertaining to heath status and utilization of maternal health care services, along with critical indices for availability of health infrastructure, capability to utilize health services, and domestic violence (indices constructed using factor analysis). We perform bi-variate analyses, including Chi-square test to determine the difference in proportion, and conduct binary logistic regression to estimate the net effect of predictor variables on maternal morbidity. Age, parity, socio-economic status, religion, caste/social group and region are all significant predictors of maternal morbidity. Indicators of women's nutritional status, and indices measuring availability and capability to use health infrastructure, along with that of domestic violence are highly significant and underscore the urgency and importance of improving women's health, economic status and autonomy for reducing maternal morbidity in rural India.

An Inter-State Analysis of Public Health Expenditure and Health Development in India

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The basic objective of the Indian healthcare policy is to meet the country's health needs in the most equitable and efficient manner, especially to the marginalized and vulnerable sections of the population. To achieve this objective, one important component is the financing of healthcare through public channel. Regarding this, over the last several years in India, there has been some perceptible change in the national government's approach to the health sector. This can be visible in the form of share of health expenditure to total expenditure on social services sector, which has increased from 3.4 per cent to 4.9 per cent from 2003-04 to 2015-16, respectively. In this paper, we attempt to understand more about state-level strategy through health expenditures. For this, we explore the state-level expenditures for health development. We also examine the relationship between public health expenditure and some health indicators. The study will cover the period since around 2001 while using secondary data. Suitable statistical techniques would be used while taking secondary data. It is expected that the growth of public health expenditures would be expanding to meet the growing demands for health requirements.

A Conceptual Study of Women's Empowerment and Gender-Based Violence: A Study of the Northern States in India

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Women's empowerment, the emphasis is often placed on women's decision-making roles, their economic self-reliance, and their legal rights to equal treatment, inheritance, and protection against all forms of discrimination (Germaine and Kyte, 1995; United Nations, 1995). It is important to study that how beliefs, attitudes, practices, and government policies are affecting women empowerment in northern India? Firstly, this paper examines the scenario of the status of the women and efforts made in the past and present in the northern states in India for the upliftment of women. Nevertheless, the study also examines the status of women in different religions and their empowerment regarding various indicators (Access to household decision-making power, financial autonomy, education, employment, exposure to media, the experience of domestic violence, etc.). Gender-based violence has also been investigated in this paper, which is a human right violation, a public health challenge, and a barrier to civic, social, political and economic participation. Data obtained from three rounds of NFHS (National Family Health Survey) has been used for this purpose. The result shows that nearly 37 per cent of ever-married women have faced spousal violence. The result further reveals that only 37 per cent of women during NFHS-3 have participated in households decisions. However, there is significant

variation in the level of women's empowerment across the different Northern states in India with urban-rural differential. This study is mainly focused on four Northern states, namely, Uttar Pradesh, Bihar, Haryana and Punjab.

Keywords: Empowerment, Religion, Discrimination, NFHS.

Diagnosis of Sleep Disorder Using Short Time Frequency Analysis of PSD Applied on EEG Signals (roc-loc) Channels

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Sleep disorders may be one of the reasons for disturbed sleep. Disturbed sleeps include many inabilities such as to fall asleep, to go back to sleep and frequent waking up during the night. Sleep disorders can be classified under primary and secondary sleep disorders. Sleep apnea, restless legs syndrome, insomnia, periodic limb movement disorder, narcolepsy, and adequate sleep hygiene includes primary sleep disorders. Whereas snoring and eating sleep order include secondary sleep disorder. By the improved recognition of sleep disorders, there is increase in the variety of treatments available. In this paper, we have done by the analysis of several patients of rapid eye behaviour disorder (RBD), and normal people we have calculated an accurate PSD estimate (Welch method). Most importantly, MATLAB® software helps a lot in the calculation of PSD estimation. After the analysis of normalized power of normal person a range is defined, by which the comparison of normalized power of patients of eye behaviour disorder (RBD) is done. The result of comparison gives the accurate estimate of PSD for sleep disordered breathing. The future scope of this project can be very interesting and meaningful. The analysis of patients can be done on a wide scale; the more patient analyses the more accurate will be the result. Working on all channels, with different PSD estimation methods can be very productive. Thus, this paper can be very helpful for human health.

Prevalence of Exclusive Breastfeeding Practices and its Associated Factors in Maharashtra: A Spatial and Multivariate Analysis

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India is committed to achieving its National and Millennium Development Goal 4 of reduction in infant mortality. The Government of India has been implemented initiative to promote breastfeeding through the national health program. WHO has recommended that every child should be exclusively breastfed (EBF) for the first six month of life, with partial breastfeeding continued until two years of age. In addition, it would evaluate the success of ongoing programs and of various other activities promoting breastfeeding. Aims and objectives: The present study is to assess the prevalence of EBF and associated factors among mothers having children aged 0-6 months in Maharashtra.

Data and Methods: Data were extracted from for Maharashtra from District Level Household and Facility Survey-4, conducted during 2012-13. A sample of married women, aged 15-49 years, having children aged 0-6 months were considered as unit of analysis. Median duration of EBF, full breastfeeding and any breastfeeding were computed using current status data on breastfeeding for the selected background characteristics and EBF prevalence was calculated using 24-hour recall method. Bivariate and multivariate logistic regressions were used to assess the association between selected independent variables and exclusive breastfeeding. In spatial analysis, Moran's I was computed which is commonly used statistics to assess global spatial auto correlation for a given variable. Univariate LISA (Local Indicator of Spatial Association) cluster map were also computed to assess the spatial auto-correlation.

Results: The results show that prevalence of EBF in the last 24 hours preceding the survey was low. Multivariate analysis revealed that increasing infant age was associated with significantly less EBF, age of infants 0-1 month.

Utilization of Maternal Health Care Services in Northeast India

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Antenatal care services contribute to improve maternal health by receiving advice on correct diet, the provision of iron and folic acid tablets, and tetanus injections to pregnant women in addition to medical care. Utilization of ANC depends on the education of the women and also the socio-economic status of the family. The study analyzed the association of background characteristics and utilization of antenatal services in North-eastern state of India using the District Level Household Survey (DLHS) 4. Simple descriptive statistics analysis and multivariate analysis were used to achieve the set objectives by taking tetanus toxoid vaccine, IFA tablet, place of delivery as dependent variable; while social group, religion, household type and wealth quintile will be independent variable. Analysis found that 69 per cent of the women received ANC for the last pregnancy while Sikkim has the highest ANC (91 per cent) followed by Tripura 81 per cent on the contrary, Nagaland has the low coverage on ANC (40 per cent). The utilization of government hospitals is higher in contrary to private hospital while Mizoram shows highest (95 per cent) in government hospitals lowest in Nagaland (68 per cent). It is also found that in every state TT injection has been received by almost all the women in the last pregnancy. Sikkim has the highest women who have taken more than 100 IFA tablet while Nagaland has the lowest. Though ANC at least is very high but the full ANC is low, while institutional delivery is found high in government hospitals in most of the state.

Impact of Janani Suraksha Yojana and Maternal Health Scenario in Jhabua District

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Tribals are majorly neglected and highly undeserved, under-privileged group that deserves the maximum healthcare. India, too, is progressing in same direction, providing better healthcare facilities and benefits as much as possible. However, the picture of Jhabua (Madhya Pradesh) has another story to tell. With only half of the women receiving cash benefits through JSY, the rate of ANC and PNC is also alarmingly low. With half of the women receiving no money and with out of pocket expenditure being as high as Rs. 900 per delivery, the tribals are falling into debt trap. Also, the focus of the scheme has been more on the motivational amount for institutional deliveries, with little attention to overall health of mother and child. This is bound to create other severe health problems. The paper looks into these challenges and tries to explore various ways in which these challenges could be effectively handle. The solutions are sought from the recipients and the policy providers at the ground level. The most spectacular solution was reaching the eligible couples in person and counselling them. The other solution provided by one of the ASHA workers was to keep reminding the couples in person about check-up schedule, vaccination and often of the iron dose and diet. Given the requirement of huge scope of improvements in the scheme, there is need to implement target-based service delivery and introducing innovative solutions to the tribal healthcare.

Vitamin D Deficiency among Obese Adolescents in Puducherry

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Sunlight is the only major source of Vitamin D. In spite of abundant sunlight Indian adolescents are found to be deficient of this vital nutrient. The primary objective of the study was to find out the prevalence of Vitamin D deficiency among overweight and obese of college going adolescents. Survey was conducted to find out the socio-economic background, health profile and physical activity behaviour among the college students studying in government Arts and Science colleges in Puducherry. For the biochemical analysis of Vitamin D, a sub-sample of 60 willing obese adolescents was selected. Mean weight of obese girls was lower than boys whereas Body Mass Index of girls was higher than that of boys. Bone mass was higher in males than in females. Sunlight exposure, regular exercise and physical activity were found to be very low in Vitamin D deficient adolescent girls than in boys. Unhealthy food habits and physical inactivity were the primary factors which contributed to obesity which, in turn, lead to Vitamin D deficiency in adolescents more in winter than in summer.

Trends of Water Sanitation and Hygiene Programs and Situation in India

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Introduction: The world's poorest people are still waiting for safe water and proper sanitation facility. A country's future human resource development is determined on the basis of the developmental indices like infant mortality, morbidity, prevalence of disability, living conditions and education of children. Better water supply, improved access to sanitation, proper disposal of hazards of wastes are a necessity for sustainable development of a nation.

Objective: In this article author explored the trend of programs related to water sanitation and hygiene through available literature, which provides a clear picture of achievements and drawbacks of the same.

Review of Literature: The transmission routes of different excreta and water-related diseases are closely linked and are best imagined as a web of pathways influencing each other. The estimated impact of improving water supply, excreta disposal, and hygiene practices for all would reduce global child mortality by a third. There are various innovative approaches and programs to improve hygiene and sanitation in India like Community-Led Total sanitation, micro- credits for water supply and sanitation, Total sanitation campaign, waste water treatment plants, Swachh Bharat mission, ecological sanitation, etc. In the present era, most of the corporate sectors are also implementing hygiene and sanitation programs with CSR budget. The author also used the SWOT analysis of various WASH programs and found that strength part holds more weightage.

The Life, Work and Health Conditions of Auto Rickshaw Drivers in Delhi: An Exploratory Study

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Background: In India, 92% of the total workforce consists of unorganized workers. Present study looks at the informal sector that operates in the public transport service industry in Delhi. The importance of auto-rickshaws cannot be undermined. Auto rickshaw drivers (ARDs) are categorized into self-employed semi-skilled workers. Health and well-being of the drivers hold an important relationship with their nature of work, condition of living and work. It is important to adopt an approach, which will help us to understand the life conditions, lived experiences, work conditions and health seeking behaviour of the ARDs through a public health perspective.

Objectives: To study the socio-economic, demographic profile and work conditions of ARDs. To assess the health status in the form of self-reported morbidity pattern.

Methodology: In depth interviews were conducted with 30 ARDs at their home with other family members using snowball sampling technique from October-December 2015.

Results: 90% of the ARDs think that there health is affected by their occupation. 22 respondents are currently driving and rest of them have left driving either due to health problems or have bought taxis. Tiredness, gas in abdomen, back pain, swelling in legs were commonly voiced health problems. The differences in the health problems were graded according to the number of years of driving.

Implications: Study has revealed the perceptions of this section of society related to their life, well-being and work. It is important to emphasize that general well-being and not only physical health must be taken into consideration while formulating public policy.

Exploring Determinants of STD/STI Using Case Control Study in Varanasi, Uttar Pradesh

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STDs constitute a major public health problem in India, however, estimates of STI burdens are less reliable in countries with less socio-economic status because of lack of consistent survey and reporting methods. Nevertheless, proper understanding of the patterns of STDs prevailing in different geographic regions of a country is necessary for proper planning and implementation of STD control strategies. With this context, using case control study design present study assesses the quantum of risk factor for STI/STD and attempts to develop the score for screening STI/STD at community level in Varanasi district of Uttar Pradesh. Both bivariate and multivariate analysis were used to fulfil the proposed study. Findings demonstrate that factors like age, gender, marital status, family type, family size, and per capita monthly income, age at marriage, history of migration, history of alcohol intake, and history of international travelling as major determinates of STI/STD. For example, males were 2.5 times (CI: 1.229 - 5.198) and migrants were 3.08 times (CI: 1.456 - 6.546) more likely to have risk of STI/STD, ROC Curve is drawn of total score to screen the STI/STD cases. The range of total score is lying between 5 and 34.5. 76% Sensitivity was observed at the total score of 12 with 65% specificity.

Reproductive Morbidity, Human Capital Support and Underlying Factors of Reproductive Morbidity among Indian Women: An Econometrics Approach

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Background: The menstrual disorder and vaginal discharge are one of the most common reproductive morbidities among married mothers in rural settings in developing countries including in India, which influences sexual as well as social life.

Data and Methods: Utilizing the data from two waves of National Family Health Survey (1998-2005), this study investigates nutrition and human capital as a determining factor of RM. The study hypothesizes that better nutritional intake and higher human capital index favors lower RM in India. The factors such as low BMI and low partner's human capital index were utilized to understand the menstrual-related-problem and abnormal-vaginal-discharges among Indian women. The severe problematic menstruation was given higher score as these prevent from day-to-day social meetings and make them partially isolated. Similarly, severe-vaginal-discharge affects sexual life more severe. The simultaneous equation modelling and decomposition techniques were used to justify the objective.

Findings: Higher percentage of women reported problematic menstruation. The women of households sharing their toilet with other households were at increased risk of excessive bleeding. Controlling education among women and equalizing partners' human capital index would be expected to reduce the self-reported reproductive morbidities. Similarly, shifting the low women's partners' human capital distribution to higher counterpart would prove the largest decrease in prevalence of reproductive differential. The illiterate women were at increased risk of prolonged bleeding than their counterparts.

Conclusion: The education, place of residence, high human capital index, and BMI were reportedly significant factors shaping the percentage of reproductive morbidities among ever married women in India.

A Comparative Study on Complications during Delivery and Post-Delivery Period Using DLHS III & DLHS IV

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A pregnancy that has progressed without any apparent hitch can still give way to complications some complications of pregnancy also cause problem during delivery or post-delivery period, for example, pre-eclampsia, which involves high blood pressure accompanied by problem in the urine can develop any time from the 20th week of pregnancy through the 6 weeks after delivery. Also Kerala

has the highest percentage (79%) of pregnancy problems. A significant number of women suffer from pregnancy related problems. One notable aspect here is that almost one-third of the deliveries in Kerala are caesarean section. The main objective of the study is to analyze the complications during delivery period of currently married women in Kerala and to analyze the complications during post-delivery period among the currently married women. The data used for this study is taken from the third and fourth phase of the Direct Level Household Survey conducted in Kerala during 2007-2008 and 2012-2013. The results show that nearly 23.81 of the women had any in Kerala are obstructed labour, premature labour, convulsion/high BP and prolonged labour. The delivery complications are higher among 35 or more years of age and lowest in 30-34 age groups. The anti-natal care plays a main role in delivery complications. ANC received women have less complications. The different types of post-delivery complications are high fever, lower abdominal pain, foul smelling vaginal discharge sever fever, excessive bleeding, convulsion/high BP and others. The analysis shows that women with higher age at marriage have more post delivery complication. In Kerala the percentage of women who had post-delivery implications was the highest for those aged 20-24 years.

A Case for Couple HIV Testing among Migrants: Evidence from Integrated Counselling and Testing Centre in Odisha, India

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Background: Odisha is a low HIV prevalence state (ANC-HIV positivity of 0.42% as per HIV sentinel surveillance 2010-2011); however, it is an important source migration state with 3.2% of male migrants reporting to be PLHIV. USAID PHFI-PIPPSE project is piloting a source-destination corridor programme between Odisha and Gujarat. In Odisha, the focus has been on developing a comprehensive source migration strategy. The project attempted to identify vulnerable districts with high out migration and high positivity rate.

Description: 48 out of 97 ICTCs were selected from nine top high out migration districts through multi-stage sampling. A retrospective descriptive analysis of HIV positive male migrants and their female spouses for two years (April 2013-March 2015) was conducted. A total of 3, 645 HIV positive records were analysed.

Lessons Learned: Among 34.2% detected HIV positive in the ICTCs, 23.3% were male migrants and 11% were female spouses of male migrants (almost 50%). More than 70% of the PLHIV male migrants and their female spouses were less than 45 years old.

Conclusions: Couple HIV testing approach may be considered for male migrants and their female spouses. ICTC data analysis could guide in identifying the locations with high positivity among migrants and their spouses.

Means to Provide Customized HIV Services to Migrants: Evidence from Gujarat, India

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USAID PHFIPIPPSE project, in collaboration with the National AIDS Control Organization (NACO), worked on the development of the Migrant Service Delivery System (MSDS) to track migrants with respect to their profiles, HIV risk and vulnerability; for providing customized services.

Description: MSDS is a web-based system, designed and piloted to increase service uptake among migrants through evidence-based planning. This system was piloted in three destination interventions in Surat. Surat is one of the largest immigrant districts in the country with varied occupational groups. Two separate MSDS interventions were chosen for the study; diamond workers and loom workers to understand occupation-related risk behaviours amongst the migrants. Registration data of 9, 375 diamond and 9, 804 loom workers were analyzed through MSDS for the period April 2014 March 2015. Comparative analysis made on specific indicators amongst these two occupational groups to understand the risk behaviour and their vulnerability to HIV.

Lessons Learned: Out of the total diamond workers enrolled in MSDS, 27.53% reported to have had sex with others than their spouses, compared to 36.58% loom workers enrolled in the program. 26.36% migrants, belong to diamond industries, reported not to have used condom in their last sex act compared to 76.46% migrants belong to loom industries. As regard to addiction, 4.46% diamond workers reported to have consumed alcohol compared to 67.08% loom workers.

Conclusions: MSDS provides an effectivc way to track risk and vulnerability to HIV of a large number of migrants on a real time basis, including the differential behaviour of different categories of migrants. This information could be crucial in providing need-based HIV prevention services to different categories of migrants. NACO is working towards scaling up MSDS across the country.

The Associated Factors with Attitude Towards Intimate Partner Violence Against Women in Pakistan

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Adherents of Islam constitute the world's second largest religious group. According to a 2010 study, which was released in January 2011, Islam has 1.7 billion adherents, making up over 23.4% of the world population, out of which Pakistan share is 11 per cent. Intimate partner violence against women (IPVAW) is deep-rooted in the all societies around the world. The Human Rights Watch found that upto 90% of women in Pakistan were subject to some form of maltreatment within their own homes and Honour Killings in Pakistan are a very serious problem. It is considered a prerogative of men

and purely domestic matter in the societies. IPVAW is one of the greatest barriers to ending the subordination of women. Violence against women, especially by intimate partners, is a serious public health problem that is associated with physical, reproductive and mental health consequences. Even though most societies proscribe violence against women, the reality is that violations against women's rights are often sanctioned under the grab of cultural practices and norms, or through misinterpretation of religious tenets. The majority of violence occurs within marriage, which is less reported but very much accepted by societies. Using the recent Pakistan DHS 2012-2013 data set violence by intimate partner has been examined. Women of this country have lower status, more illiterate and their work participation rate is underestimated than their counterparts. The aim is to access the net effects of socio-demographic factors on men's and women's attitude towards IPVAW using multi-nomial logistic regression models estimated by likelihood ratio test.

Determinants of Wellbeing among Elderly in India (SCL/PRB Index)

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As the percentage of elderly population is expected to rise from 7.4 in 2011 to 12.4 per cent in 2026 (RGI, 2011), it is a matter of grave concern for the policy makers taking into account the well-being of the elderly. The determinants of well-being vary widely, according to different socio-cultural norms and economic conditions of the country. In India, due to its well knit family structure and widely prevailed joint family system, well-being of elderly is expected to be better. The multivariate analysis has been carried out and the index of SCL/PRB techniques to summarize the status of overall well-being in India. The Index stands on 9 key indicators and 3 major domains are generated average score of within the domain into two ageing cohort groups. Composite score of 100 for the SCL/PRB index may be interpreted as the average proximity to the best possible level of multi-dimensional aspect of well-being across India. The overall well-being scores are found to be higher in Kerala and Punjab, whereas the worst in West Bengal in case of Physical well-being. Further, emotional well-being is being quite low across India. Another major key finding is that though physical and social well-being is better in southern states than northern, eastern states, but emotional well-being and suicide rate picture is just the opposite. So, Government needs to implement elderly oriented policy to the betterment of their condition. However, there is a requirement for in-depth details, which could be achieved only through primary studies.

Mental Health Service System in India

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Introduction: Mental health service system is a system of care with any group of professional, government, NGOs, which operate at international, national, state and community level to help in prevention and treatment of mental illness and mental disorders. Mental health service means medically needed out patient, inpatient and rehabilitation services which provides treatments for mental disorders which are covered in the diagnostic categories which listed in the current version of the DSM and ICD.

Mental Health Service System: To provide these services to needy people, the government has planned mental health services at national, state and community level. To monitor all these services and systems, there is Central Mental Health Authority at central level and State Mental Health Authority at state level. These authorities are audited and certified by the Comptroller and Auditor General of India which is the Supreme Audit Institution of India.

Mental Health Service: It has started with Lunatic Asylum Act of 1858 and developed in the period of post-Independence with national health policy of 1983 and 2002 and to provide mental health service, Government of India established first mental health policy in 2014.

Conclusion: In this article author described the present Indian mental health service system, its structure, function, role and responsibilities of each mental health service system which function at the national, state and community level and evaluated mental health system in India.

Epidemiology of Malaria Cases in India: A Statistical Analysis

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In this paper, we studied the state-wise patterns of transmissibility of prevalence of malaria epidemic in India, using yearly time series data for the period 2001 to 2013. The data for the study was obtained from different reports of National Vector Borne Disease Control Programme (NVBDCP), Ministry of Health and Family Welfare, Government of India. The time series data was initially analyzed by using the Confidence Interval and Chi-square tests. We have also used the Analysis of Variance (ANOVA) and a post hoc Tukey HSD tests to analyze the geographical differences between means of prevalence rate of malaria. The result of the study reveals that prevalence rate of malaria shows a decreasing trend for the study period from 2001 to 2013 in India. Further, ANOVA test has shown a significant difference between the prevalence rates of malaria across different states in India, even though a decreasing trend was noted over the study period from 2008-13. Also eight homogenous subgroups were formed by using post hoc Tukey HSD test, in which four states, viz., Mizoram, D & N Haveli, Arunachal Pradesh and Meghalaya had the highest prevalence of malaria as compared to other states of India; Delhi,

Bihar, Himachal Pradesh, Kerala, Jammu & Kashmir, Lakshadweep, Sikkim, Punjab, Puducherry and Uttarakhand had the lowest prevalence rate. The results of this study can be of critical importance as different authors attempt to explore novel approaches to investigate the geographic variation in disease occurrence.

Status of Disability in India: Trends, Prospects and Disability Deprivation Index

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Objectives: This study aims to estimate the level, trend and prospects of disability in 640 districts of India during 2001-2021, change in non-congenital disability and further to construct Disability Deprivation Index at sub-national level.

Design: Data for the present study is borrowed from Census of India 2001 and 2011.

Participants: All the information about the persons at all ages has been obtained from Census of India 2001 and 2011.

Measures: A disability index was calculated at the district level, and state level indexing is done using Disability Deprivation Index. Population for the year 2021 is projected using the exponential growth rate method. Disability Deprivation Index was calculated using child labour, adult unemployment, illiteracy in the disabled population and the ratio of beggars in the disabled population.

Results: The study reveals that the proportion of disabled population in India was 2.10% in 2001 which increased to 2.21% in 2011. In 2011, the proportion of the disabled population was maximum in Hyderabad district (4.57%) and minimum in Daman district (0.76%). According to Disability Deprivation Index Maharashtra was best-performing state in 2011. There were 4.90 million new cases of disability in India during 2001-11 out of which 1.52 million cases belong to non-congenital disability. By 2021, the disability proportion in India will increase to 2.3%.

Conclusions: There is a rise in the disabled population in India, which needs special attention. The situation of the disabled working status is gloomy. The majorities of the disabled people are non-working and need effective rehabilitation measures that would facilitate employment.

Projections of Burden of Tobacco-related Cancers in India and Its States Till 2025

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Cancer has emerged as an important public health problem in India also as a result of control of infectious diseases and resultant increase in life expectancy during second half of last century. Tobacco use is a measure contributor to the cancer burden, which is preventable. It accounts for 30 to 50 per cent of cancers in males and 10 to 20% in females. Therefore, the objective of the present study was to assess the burden of tobacco-related cancers (TRCs) for India and its states for 2010-2025 National Cancer Registry Programme (NCRP) of ICMR is the only source of reliable data on cancer in India. The cancer incidence rates generated by population-based cancer registries under NCRP and population of India and states projected by the Registrar General of India formed the sources of data. Best possible assessment of incidence rates for states using limited data available was worked out. The linear regression method was used to assess trend and project the rates for the study period 2015-2025. Overall burden of TRCs in India was estimated to be 285 thousand in 2010 and it was projected to increase to 446 thousand by 2025, an increase of more than 50%. Major portion of this burden was due to tobacco use in men (three-fourth) and in rural area (two-third). Detailed analysis indicated regional diversity in the burden of different types of TRCs. In view of increasing burden of TRCs, there is an urgent need to initiate focused tobacco prevention measures to combat the same.

Maternal Mortality in Nigeria

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For women, the picture is despairing indeed, Africa has more than a fair share of maternal deaths. While only 11 per cent of women live in Africa, an estimated 30 per cent of maternal deaths take place in the continent. Nigeria, the most populous country in Africa, has one of the highest maternal mortality rates in the world (Harrison, 1997) and, hence, it remains a major public health issue. The Safe Motherhood Initiative, and is one of the elements of Millennium Development Goal 5, which seeks to improve maternal health (WHO, 2010). Nigeria contributes 14% of global maternal deaths with a maternal mortality ratio of 630 per 100,000 live births (World Bank, 2013). The high maternity rate has been attributed to inadequate use of maternal health care services (HV, 2011). The present study estimates the trend pattern and determinants of maternal mortality using DHS data of 2008 and 2013. Motherhood method has been used to estimate the maternal mortality due to no direct method could be applied due to unavailability of the required data for direct estimation. Results shows huge variation in the pattern of maternal mortality is still very high and it varies across the region. Over the years, increase and decline in Maternal mortality has also been observed indicating the extensive need

to the policy intervention. Individual characteristics of mothers found to influence maternal deaths include maternal age, educational attainment, socio-economic status and antenatal clinic attendance also, cultural practices plays significant role in determining the maternal mortality in Nigeria.

Performance Evaluation of Primary Healthcare Centres in Uttar Pradesh

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Importance of Primary Healthcare Centre is realised on the ground where it acts as a link between individual and national health system for bringing health care delivery at the door steps of the community. The PHC is basically entrusted with the responsibility of providing integrated, curative and preventive health care, especially to the rural population with a major emphasis to be laid upon the preventive and promotional aspects. According to the reports of Rural Health Statistics, Uttar Pradesh accounts for the largest number of PHCs in the country. The primary objective of this paper is to access weather the PHCs have been able to bring the health care within the reach of people in rural areas of Uttar Pradesh. In order to study the particular objective, the quality of service provided by the primary health care centres will be dealt under two heads: Technical Services and Behavioral Services. Here, the technical services include facilities for diagnosis, child immunization and patient care and the behavioural component include the motivation level of doctors and staff to provide high quality services like counselling for family planning etc. Secondary data will be used to gauge the availability and adequacy of the infrastructure and related facilities, information of which will be collected from established sources including Manual of Health Statistics, Data of planning commission, Rural Health Statistics and related surveys. Further simple statistical tools will be used for the analysis of the available data.

Contemporary Health Status of Tribal Women: A Study of a Transhumant Gaddis Population of Himachal Pradesh

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The Gaddis, a Scheduled Tribe of Himachal Pradesh, are found mostly concentrated in Bharmaur Tehsil of Chamba district and along certain foot hills of Dhauladhar and Pir Panjal ranges in Kangra and Mandi districts in the western Himalayas. They are semi-nomadic, semi-agricultural and a semi-pastoral tribe and are one of the most dominant and popular tribes of Himachal Pradesh. They have a distinct culture, expressed through language, song, dress, food and marriage. They used to spend six

months in migration due to winter's heavy snowfall in the lower hills and plains along with their flock of sheep and goats in search of grass and fodder and seasonal employment for themselves, and six months in their villages for sowing and harvesting their crops. An attempt has been made in this paper with the objectives: 1) To study the transhumant Gaddi population of Himachal Pradesh that travel from one ecological zone to another in winter and summer; 2) To study the health status of Gaddis women. Gaddi women occupied a vulnerable position not only in their family set-up but also in economy. The health of tribal women is more important because tribal women work harder and family economy and management depends on them. The findings of this paper are that ecological and environmental factors have given to Gaddis women a special economic power, an elevated social status and authority almost equal to men but having low health status.

Linkages Between Health and Environment: The Challenge of Profiling Risks and Strategic Priorities of Today and the Future

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The impact of environmental degradation on health may continue well into the future and the situation, in fact, is likely to get worse. A substantial burden of communicable and non-communicable diseases in India is attributable to environmental risk factors. WHO estimates that the environmental factors are responsible for an estimated 24 per cent of the global burden of disease in terms of healthy life years lost. The environment linked with most of the Millennium Development Goals, without proper consideration to the environmental risk factors; it will be difficult to achieve many goals. The present study has been taken with the objectives (i) to study the linkages between health and environment. (ii) To study the impact of environment on health and challenge of profiling risks and strategic priorities. The environment has a major impact on health, and investing in environmental health is certainly a good investment. Rapid urbanization, globalization and an increasing population is putting further stress on the environment. If strategic actions are not taken urgently by all sectors, the problem is likely to worsen thereby impacting human health directly. Without priority being allocated to interaction between environment and health, it will be a challenge to achieve human health. To meet the challenge of health and environment now and in the future, the strategic approaches must be considered which include conducting environmental and health impact assessments; strengthening national environmental health policy and mobilizing public participation. The future of the planet as well as humans now rests solely on what we decide and do today for the environment.

Social Rituals and Infant Feeding Practices in Dhangar Tribe of Maharashtra: An Exploratory Study

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Background: Infant feeding with emphasize on exclusive breastfeeding is critical for child health and survival. The awareness and practice of proper breastfeeding and exclusive breastfeeding is essential for healthy nurturing of child and mother.

Objectives: The paper aims to explore knowledge, perception and practices of breastfeeding and complementary feeding in Dhangar tribe.

Methods: Qualitative study, comprising 17 in-depth interviews with mothers and 7 focus-group-discussions with grandmothers, were conducted in seven tribe dominated villages of Maharashtra. Nvivo-7 was used for content analysis.

Results: The awareness on infant feeding and benefits of exclusive breastfeeding was inadequate in the community. Though mothers fed colostrum to babies but majority practised pre-lacteal feed before starting breastfeeding. Perception that breast-milk is the best source of nutrition did not motive them for exclusive breastfeeding as many exclusively breastfeed only for 3 months but some kept-on giving water and other recipes. Their practice on frequency of breastfeeding per day, breastfeeding during illness, terminating breastfeeding, restricting food intake for lactating mothers was not conducive. Mothers received advice from their mothers/in-laws on breastfeeding. Period of initiation of complementary feeding varied from one to eight months with increase in quantity with advancing age.

Conclusions: Infant feeding practices were influenced by traditions and beliefs. Existing improved health care system could not modify their behaviour. Health education and counselling may be appropriate to improve the practices.

Health Problems and Health Seeking Behaviour of Women Vendors in Moreh Town, Indo-Myanmar Border

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Introduction: Women vendors contribute an important financial support to the household in the town. However, we know little about their health impact on both physical and mental well-being due to their daily work. The majority of women today simultaneously perform demanding work and family roles. Yet, women continue to shoulder the main responsibility for household tasks and childcare. According to different studies, the total number of street vendors in India is around one crore (GOI, 2004). 'Ima

Keithel' in Imphal, completely run by women society, gives women vendors in Manipur, in taking responsibility of family economy by carrying out trade and commerce.

Aim: The author studied self-reported health among women vendors in relation to their work (work hours) and socio-demographics, household characteristics. It also attempted to examine the treatment seeking behaviour of women who have self-reported illness.

Methodology: A cross-sectional study was conducted, a total of 336 eligible women vendors were selected purposively who have been residing in the area and working as vendors for more than a year. Self-reported health issue and health seeking behaviour were analysed. Univariate, bivariate and appropriate multivariate analysis is used for the study.

Result: Around three-fourth of the women respondents (73.5 per cent) have suffered health problem. Malaria and join pain is the common self-reported health issue with 21.2 per cent and 19.6 per cent. Less than half of the respondents (46 per cent) have sought advice for treatment. Homeopathy/Ayurvedic treatment is the most common with almost half of the respondents (46.4 per cent) seek treatment from it.

Health Insurance: A Solution for Growth of Economy

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This research involves discovering how high out-of-pocket health expenditure in India has affected the people of the country with regards to erosion in family savings which has brought them into poverty and consequently affecting the economy of the country in terms of low GDP growth, low labour productivity and how health insurance will help tackling the problem and become the most effective solution. The goal is to show that financial resource crunch has often staved off most of India's population from proper medical cure due to the fee hikes, low penetration of health insurance and high out-of-pocket hospitalization expenses. This has been done by examining the figures like out-of-pocket health expenditure in India, number of people acquiring diseases and hospitalized, percentage of people dragged into poverty because of high health expenditure and medical cost in the country. These data has been taken from various organization like WHO, published research papers on health condition in India, IRDAI journals and other sources like newspaper articles which conclude that medical bills are financially shocking, inferring that

1) Out-of-pocket expenditure by households is very high in comparison to other countries, and accounts for about 71% of all health expenditure in the country.
2) Due to under-funding of government health care, preventive and primary care and public health functions have been neglected.
3) Only about 8% of the country's population has been covered by a commercial health insurance product excluding mass government schemes.

Also examination has been done on figures of economics like GDP growth, household savings, and

people under poverty line. Upon examination, it becomes clear that there is a link between out-of-pocket expenditure and poverty and is also validated in draft of India's National Health Policy 2015, claiming that 55 million Indians fell into serious poverty-trap because of their health care spending during 2011-12.

Through showing the features of health insurance and that it works on law of large numbers, which spread the risk among the population due to which the premiums an individual would pay for health insurance is very less as compared to the amount of risk covered (sum insured). This research highlights the importance of health insurance and the role it plays in decreasing out-of-pocket health expenditure, increasing household savings eventually increasing the economic growth due to high labour productivity. Thus to the rescue are insurance companies with various schemes under Health Insurance, which ensures for proper treatment without any hassle. The research also highlights approach in making health insurance affordable, in increasing the awareness of this protective role of health insurance with renewed focus on marketing of health insurance products on the part of insurers.

It throws light on health insurance portfolio, which is now the fastest growing market segment for the non-life insurance industry. With the arrival of private insurance companies and standalone health insurance companies there has been tremendous innovation in policies offered in the Indian insurance market.

Changing Role of Health Insurance: A Study of Wellness Products

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This study looks at the changing role of health insurance. This study is based on the secondary data available through various sources. Earlier the role of health insurance was confined to providing finance in case of any emergency, but today with various wellness products coming up they are more inclined towards managing the health of the insured. Wellness is the latest development in the health insurance field. With the increased customer engagement plans, the health insurance companies try to keep and improve the health of insured so that the risk is reduced. Because of rising incurred claims ratio and health issues in urban areas these products are becoming more popular. Various initiatives are taken by the insurers to improve the health of the insured. This can be done by making them aware through various health-related articles, newsletters, etc. At the same time customers are also encouraged to stay fit by providing discounts on taking up medical test, smoking cessation, joining gym, etc. Wellness concept is a win-win situation for both the insurer as well as insured. Both the parties will be benefitted from this initiative. Thus, wellness products are the perfect example of change of ideology in health insurance industry and with advancement in technology, it can be called as the future of health insurance industry.

Impact of Rising Healthcare Expenditure and Its Role on Insurance

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This research involves the study of healthcare expenditure which has grown manifold over the years, and its impact over the common man. The role of the insurance industry, especially health insurance is also considered which is also growing over the years. People generally understand the importance of health insurance only at the time when they are struck by an illness, when they realise how big a hole the treatment makes in their pockets. We try to figure out the gap that exists between the healthcare costs and the current insurance which has been availed for the same, and try to put forth the need to educate the masses on the importance of health insurance.

Healthcare is one of the important needs of every human after the basic human rights. Quality healthcare should be available to the people is necessary for the improvement of the well-being of the people of the country. Quality healthcare comes with a price that may not be affordable with the people who are in the economically backward section of the society. Diseases of the category those requiring tertiary care treatment with long duration hospitalization is a financial burden even for middle income society.

Countries like India facing hurdles in providing quality healthcare services to its entire population. Some of the healthcare facilities are delivered outside the required standards. Thus, the funding for those is not included in the healthcare costs. Healthcare facilities in the small towns also getting upgraded is good notion for the industry. Increased awareness and consciousness about the health and the increased income levels helping the population for seeking a better healthcare facility. Insurance industry in India, as a whole, is in a phase of transition. Health insurance in India has a bright future. Rising awareness levels and healthcare costs has started making people go in for health insurance. Healthcare financing has undergone a major change when private insurance companies started functioning in the domain of health insurance. Health insurance segment has given a special attention by the insurance authority and standalone insurance companies are allowed to operate, and this is a positive sign. Increasing healthcare expenditure is a matter to be discussed and the research highlights the following problems a) Rising healthcare expenditure and its impact on people of the country as a whole. b) Impact of rising healthcare expenditure on health insurance industry.

Current Healthcare Delivery and Management of Tuberculosis and Diabetes Co-Morbid Patients of North Delhi, India

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India contributes to the highest tuberculosis (TB) burden in the world, with an estimated 2.3 million cases annually. People with diabetes (DM) have 2–3 times risk of developing active TB compared with non-DM patients. Hence, TB-DM co-morbidity is public health problem in India. There are two national health programs, Revised National Tuberculosis Control Programme (RNTCP) and National Programme for Prevention and Control of Cancer, Diabetes, Cardio-vascular Diseases and Stroke (NPCDCS) to cater health needs of TB-DM co-morbid patients in India. A qualitative study was conducted among 23 co-morbid patients registered at 3 Designated Microscopy Centres (DMCs) of peri-urban areas of North Delhi. The study objectives were to identify constraints, challenges and opportunities for RNTCP and NPCDCS programme collaboration and coordination and to elicit illness and health seeking experiences of TB-DM co-morbid patients. Preliminary findings of study revealed that for TB, patients got diagnosed and treated at respective DMCs and got screened for DM and referred to tertiary care hospitals for DM care and management. Before reaching to RNTCP the patients those who had prior history of DM were treated at various private and government tertiary care hospitals. While accessing public health services, TB-DM co-morbid patients suffered from knowledge, financial and resource constraints. RNTCP program has been screening TB patients for DM diagnosis and are referring those to tertiary care hospital for DM treatment but at the same time NPCDCS programme need to gear up for joint coordination and co-morbidity management of TB-DM patients accessing and utilizing services at various levels of public health care system.

Infertility and Involuntary Childlessness: A Socio-Cultural Study among Couples of Pune

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Traditionally, a girl graduates to a full fledged woman only after acquiring parenthood. The prominent function of marriage is childbearing.

Industrialisation, urbanisation, modernisation coupled with women's education and employment has brought about a significant drop in the average number of children borne. The predominant inclination is to have at least one child. Couple suffering from involuntary childlessness faces trauma and societal stigma. The Indian culture bestows special honour on women with children and on the other hand excludes childless women from all rituals. Involuntary childless couples opt for cultural measures

ranging from religious remedies of worship to magic and seeking medical assistance. According to WHO, the extent of primary and secondary infertility in India is 3 and 8 per cent respectively. NFHS 2 data, estimates 3.8 per cent of currently married women between the ages of 40 and 49 are childless.

Treatments of infertility include added risks of ovarian cancer, multiple child births. This results in financial burden and invasion of privacy. Prolonged treatment leads to marital distress and sometimes marital violence.

Present study focuses on married couples facing infertility and involuntary childlessness. It aims to study the societal perceptions regarding childbearing and childlessness, stress faced by couples and their socio-cultural and medical recourse of treatment. The study is being carried out in Pune using purposive sampling method. Doctors and practitioners of complementary and alternative medicine were interviewed as key informants.

The study aims to shed light on the socio cultural aspect of infertility to help the couples to better cope with the issue.

Out-of-Pocket Expenditure for Treatment of Childhood Disability Arising Due to Birth Defects

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Background: Birth defects are one of the major causes of childhood disability and disabling childhood conditions. Limited services for common birth defects like congenital heart defects, orofacial clefts or clubfoot are available at subsidized cost at public hospitals.

Objective: This study aimed at determining the action taken after medical advice and the out-of-pocket expenditure incurred by families of children affected with birth defects.

Methodology: Forty children born with disability (clubfoot) or a disabling condition (congenital heart defect, cryptorchidism, renal pylectasis, Down syndrome, thalassemia) were recruited from the Pune Urban Birth Outcome Study (PUBOS). A pre-tested structured questionnaire was used to collect data related to medical advice given to the family, action taken by the family and the medical expenditure in case of treatment of the birth defect. Out-of-pocket and catastrophic expenditure was estimated using previously published methods.

Results: Medical advice was given to 28 parents, of whom fifteen families sought medical treatment, three families were asked to wait by the doctor and four families cited financial reasons for not following medical advice. Six families denied that the child had any disability. Perception of stigma was observed among families. Among families reporting medical expenditure, the monthly expenditure on treatment ranged from 1.2 to 2.2 times of the monthly income. Nearly 47% of families experienced catastrophic expenditure.

Conclusion: Treatment of children born with disability and disabling conditions due to birth defects resulted in significant catastrophic expenditure, which was avoided by not following medical advice.

Implications: There is need to bring disability into the ambit of child health services.

Consanguinity among Urban Women and Its Relation to Adverse Pregnancy Outcomes

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Background: Consanguineous marriages are traditional practice in twenty per cent of the world's population. Consanguinity has been associated with adverse pregnancy outcomes (APOs) as it can increase the rate of stillbirths and infant mortality, significantly increase the risk of birth defects, but not affect spontaneous abortion rates.

Objective: To describe the practice of consanguinity among urban women, study the types of marriages, and determine if there is a relationship between consanguinity and adverse pregnancy outcomes.

Methodology: Data on consanguinity was analyzed for 1907 women included in the maternal cohort, recruited as a part of the Pune Urban Birth Outcome study. Data was collected through interview, using a structured questionnaire while pregnancy outcomes data was extracted from medical records. Relative risk was computed to determine whether there was any association between consanguinity and APOs.

Results: Overall, 20% of women reported consanguineous marriages. By religion, the prevalence of consanguinity was 20% among Hindus and Muslims and 23% among Buddhist women. Uncle-niece marriages and first cousin marriages were prevalent in 12% women, while 8% women reported marriage with distant relatives. There were 1,907 outcomes, out of which there were 176 APOs (stillbirths 40, spontaneous abortions 94 and birth defects 42). The proportion of APOs were similar among first cousin and uncle-niece marriages (11%), women married to distant relatives (10.3%), and women married to unrelated men (9.8%). The relative risk for APOs was 1.1 (95% CI 0.7-1.6) for first cousin marriages compared to women married to unrelated men.

Conclusion: There was no difference in the prevalence of APOs among the three groups. In this cohort, consanguinity was not associated with the risk of APOs.

Impact of Out-of Pocket Expenditure for Treatment of Beta Thalassaemia Major Patients on Families

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Background: Data indicate that of an estimated 20,420 annual births with thalassaemia, only 9.6% of transfusion dependent patients being transfused. The National Blood Transfusion Council in India has mandated that blood is to be provided free of cost for patients with beta thalassaemia major, but anecdotal reports indicate that families incur significant out-of-pocket expenditurefor treatment of patients with beta thalassaemia major.

Objective: To estimate the out-of-pocket expenditure incurred for treatment of beta thalassaemia major patients.

Methodology: Twenty-two patients with beta thalassaemia major from 19 families were recruited and followed up for a year to document the costs incurred for treatment. The household expenditure was collected using relevant sections from the National Sample Survey Organization 68th round questionnaire. Healthcare costs were measured as direct costs (expenditure on treatment, diagnostics, and medicines prescribed) and non-direct costs (expenditure on travel, food, number of work days lost). Out-of-pocket and catastrophic expenditure was calculated using previously published methods.

Results: The median age of patients was 13 years (2 to 26 years). Of 22 families, there were 5 families belonging to lower socio-economic class and 14 families belonging to middle or upper class. Median cost of treatment was Rs. 11 528 (range Rs.3330-85 230) of which highest expenditure was on laboratory investigations. Families spent 4-47% of their income on treatment. There were 2/19 families that did not avail routine laboratory investigations, 4/19 families did not purchase recommended medicines and one patient did not avail blood transfusion since these services were unaffordable.

Conclusion: Even though the government has provided free blood to patients, families pay out-of-pocket for ancillary healthcare services and medicines. As a result, families did not avail routine healthcare services in order to avoid expenditure.

Implications: A national programme targeting diagnosis, management and prevention of thalassaemias is needed.

Practices of Alcohol Consumption among the Migrant Brick Kiln Workers in Varanasi, India

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The aim of the present study is to practices of alcohol consumption among the migrant brick kiln workers in Varanasi district in Uttar Pradesh in India. This study explores the contexts and consequences of problem of drinking by migrant brick kiln workers who resides in Varanasi district with a special focus on childhood exposure of alcohol, age at which alcohol is consumed for the first time, place of alcohol consumption, with whom they had their first alcohol experience and what were the reasons behind drinking alcohol and sexual connotation as the main reason of drinking alcohol. The present study is exploratory in nature; the sample of 400 male migrant brick kiln workers in the age group of 18-40 was selected from different brick kilns through adopting stratified random sampling approach. According to All India Bricks and Tiles Manufacturer Federation (AIBTMF, 20011-12), there were 226 brick kilns producing bricks and tiles in Varanasi district. Out of them, 55 brick kilns were located in Kashi Vidyapeeth and Araziline block, but during the pre-survey visits only 37 brick kilns were working in the study area. All the 37 brick kilns were divided into four strata based on their geographical proximity and four brick kilns were randomly selected from each of the four strata. To fulfil the objective this study uni-variate, bi-variate and multivariate like binary logistic regression techniques have been used. Finding of this study shows that around 91 per cent migrant brick kiln workers reported consume alcohol due to frequent overtime involved in the work. More than three-fourths migrant brick kiln worker consumed alcohol because of their work demands that needed a lot of physical hard work, normally required in brick kiln. Nearly 73 per cent of migrant brick kiln workers said that they felt much closer to their partner during sexual activity after having consumed alcohol. Ignoring the warning signs of work stress leads to physical and emotional health problems, as a result more than four -fifth of the workers started drinking alcohol in order to reduce their stress without knowing that too much alcohol use caused rebound anxiety, mental and physical health problems. Binary logistic regression results show that migrants brick kiln workers who have completed middle/upper primary level and above were 2.3 ($P<0.10$) times more likely to have first alcohol use at the age of 18 or more whereas migrant brick kiln workers in the age group 21-30 years and more than 30 years were less likely to have childhood exposure to alcohol use 0.22 ($P<0.01$) and 0.15 ($P<0.01$), respectively, as compared to those who were below the age of 21 years. Drinking to relieve job stress might lead to abuse and dependence; therefore, counselling at the work place ought to be mandatory for migrant brick kiln workers. This could effectively be done by involving various civil societies' organization or NGOs, stakeholders to properly address them regarding the ill effects of risky drinking.

YOUTH BEST PAPER AWARD COMPETITION

Impact of Substance Use on Mental Health of Youth in India: Evidences from Youth in India: Situation and Needs Study

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Young people constitute almost 31 per cent of India's total population. It is the huge demographic dividend of the country. But unfortunately, it is suffering from the numerous issues, i.e., substance use, mental health and other health related issues. The aim of present study is to identify the factors contributing to substance use and vulnerability of mental health among youth in India. The paper is based on data from the survey – "Youth in India: Situations and Needs Study" – conducted in 2006-07 in six states. It is a sub-nationally representative study, using sample of youths from six Indian states (Andhra Pradesh, Bihar, Jharkhand, Maharashtra, Rajasthan and Tamil Nadu) these states represents 39 per cent of the country's population. The study has jointly been done by the IIPS, Mumbai and Population Council, New Delhi. The Youth study covered tobacco, alcohol and drug use. It also focused on characteristics of those who reported use and consumption of substance. Cross-tabulations and Logistic regression has been used in the analysis. The preliminary findings show that socio-economic factors have significant impact on the substance use among youth. Although, mental health is depend on the numerous factors but substance use has the negative impact on it. It has also come to know that educational level, place of residence and socio-economic factors have significant impact on the substance use and mental health of the youth in India. There is a strong correlation between substance use, violence and mental health of youth.

Utilisation of Post-Natal Care Services (PNC) in Rural Areas of Arunacahl Pradesh: A Case Study of Mebo

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The status of health care services is one of the critical measures particularly mother's health. Care of the mother after delivery is essential for the health and survival of a mother and her newborn. Lack of care in this time period may result in death or disability as well as missed opportunities to promote healthy behaviours, affecting women, newborns, and children. Yet, the post-natal period receives less attention from health care providers than pregnancy and childbirth, particularly in rural areas. The present study aims to study the utilisation of post-natal care among the rural women of Arunachal Pradesh with specific reference to Mebo Sub-Division. It also aims to study the factors associated with the utilisation of PNC. The study is descriptive in nature and cross-sectional in design. Both primary and secondary data are used. 279 numbers of women, who had at least one delivery during the last three years, were interviewed.

Emerging Health Issues and Problems among the IT Professionals in Pune

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Booming Information Technology (IT) industry in Pune attracts young talents and professionals with high salary. The earning potential is much high in IT sector compare to any other industrial or services sector. Young generation of Pune, mostly in age group 25-35 years, prefers IT jobs. The nature of work in IT sector involves working in rotational shift with long working hours; using more of analytical and logical skill sets which causes a serious health issues and problems among the professionals. Continuous screening of computers for long duration with no physical activities involve causes mental stress, headache, backache, migrants, sleeplessness, muscle pains, fatigue, acidity problems, eye strain, etc. These are some emerging health issues among the IT professionals in Pune, along with frustration and psychological instincts due to work pressure, rotational shifts, leaderships, salary, etc. There is a need of framing proper planning, rules and regulations to avoid health issues among the IT professionals in Pune. Thus, this study has been undertaken and will be based on primary and secondary sources of data. The study will outline all the health issues and problems of IT professionals and provide policy implications.

Assessing the Well-Being of Elderly Using Amartya Sen's Capability

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Well-being is an inexplicit concept-hard to define, hard to conceptualise and even harder to operationalize. Because of its multi-faceted and multidimensional nature, aggregating and measuring well-being has often been difficult. Over the last decade, Amartya Sen's Capability Approach has emerged as the leading alternative to standard economic frameworks for studying the domains of deprivation and well-being which are essentially vague concepts. Under this backdrop, this paper makes an attempt to study wellbeing of India's elderly population using secondary data available from Study on Global Ageing and Adult Health (SAGE), WAVE1 survey in India (2007) through the lens of the Capability Approach, conceptualised by Sen. This paper makes an attempt in using individual level data in studying well-being of elderly in India from achieved level of functioning in the domains of nutrition, physical health and mental health, life satisfaction, social relationships and networking. Also, this study compares the variations in well-being achievements by background variables and compares between non-income and income dimensions of well-being across the states. The fuzzy set methodology is employed to compute membership degrees in each of the evaluative domain for comparing the levels of functioning in each domain. Finally, multivariate analysis is employed to study the inter-personal variations in the achievement of well-being and major explanatory factors behind

such variation. By disaggregating the overall well-being score by age and sex, we noticed that well-being declines at the higher ages and the situation is particularly worse for the oldest old segment (80 and above) showing almost nil scores in the highest category.

Performance of National Rural Health Mission in the State of Maharashtra: A Comparative Analysis of HMIS and NFHS

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National Rural Health Mission, now National Health Mission, has been one of the landmarks when it comes to improving the health machinery of India. It aimed at improving maternal and child health indicators and achieving millennium development goals. But how far it has been able to achieve that goal is a matter of debate among scholars. This paper would try to examine the performance of NRHM through the state of Maharashtra with the help of two important data sets; Health Management Information System (HMIS) and National Family Health Survey (NFHS). One is live data and the other is based on sample population. The main aim of this paper is to understand the importance of data sets in terms of presenting the performance of state when it comes to NRHM. For instance, in Maharashtra, institutional deliveries held at public health institutions were 48.9 per cent according to NFHS-4 and according to HMIS it is 62.8 per cent. Similarly, percentage of women, who registered themselves in first trimester, was 67.6 per cent in NFHS-4 and in HMIS it was 64.2 per cent. In this study, comparative analysis would be done and how different data-sets can portrait different pictures will be analyzed. This study would be significant to throw light on different data discrepancies which have a profound effect on future policies in India.

People's Perception of Access and Utilization of Health Care Services in Urban Slums of Mumbai

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Socio-economic aspects are major determinants in access to health care facilities like economic condition, education, social categories, etc. That determinants influence the health care preferences of people in various ways and degrees. The accessibility of health care services and social status influence each other. Availability alone of public, private or charitable health care services in the urban slum areas does not ensure the utilization for all population. The perception towards each other of both service providers and service users varies and so the utilization of the health care services. At the same time, perceptions get constructed and sometimes purposefully created, due to socio-economic variations. That is why the use of health services has been influenced by perceptions of the people toward the public and private health care services. Access to primary health care is particularly important for those who experience a

thinner or narrower margin of health to achieve their highest attainable standard of health accessibility of health services and social status influence each other. Various public, private, and NGO run health services are available in the urban slum areas, but accessibility and utilization are not the same to all populations because both the health service providers and service users have different perceptions and even conflicting one. At the same time, there is vast difference in the socio-economic conditions. That is why the use of health services has been influenced by perceptions of the people towards it.

A Study on Educational Attainment and Engagement in Occupation of Women in India

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Objective: Education attainment is a significant turning point of women empowerment because it enables them to response to the challenges, to oppose their traditional role and change their lives as well as position in society. The objective of this study is to examine educational attainment of women and their work participation rate in India.

Data Source and Methods: For the fulfilment of purpose, this study used the second (2004-05) and third round of IHDS data (2011-12). For the analysis purpose, used the statistical tools and extensive cross tabulation has been done.

Findings and Conclusion: Educational attainment of women has increased by almost 5% overall, and it has more in higher secondary and graduation (28.78% to 36.39% in two rounds of IHDS). Occupational engagement of women shows that there is shifting pattern from agricultural worker to all another field of occupation. There is more than 4% increase in construction worker and 1% in services in two rounds of IHDS (2005 and 2012). Regional analysis shows that women work participation rate in the service sector has increased in all region. North-east (3.3 to 5%) and South region (2.4 to 4%) women are more engaged in service sector compare to another region. Thus, the women work participation should be more appreciable through government and NGO that took reduce the gap from service to no occupation that would take India to come forward in the way of the faster growing in economic development.

Pregnancy-Related Deaths in the Gynaecology and Obstetrics Department of a Tertiary Health Care Centre of West Bengal: An Application of "Three Delays" Model

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Background: A maternal death is the outcome of a chain of events and disadvantages that a woman experiences throughout her reproductive life-span. The studies, in different parts of the world, indicate

that each maternal death has its roots in a complex interplay of social, economic and cultural factors. The present study was carried out to assess the causes and circumstances of maternal deaths in West Bengal through facility based maternal death review approach.

Methods: A total of 110 maternal deaths occurred in the Gynaecology and Obstetrics Department of Calcutta Medical College and Hospital (CMC&H) from December 2010 to June 2012 were reviewed.

Results: Most of the maternal deaths occurred in the age group of 20-24 year, women from Hindu community, in the second gravida, primiparas women, in the post-partum period. A majority of deaths were among referred cases (78.2 per cent), approximately half of deceased women sought care after 10 hours of developing complications. The contribution of delays at different levels to maternal deaths cannot be neglected. Hypertensive disorder or eclmapsia was the leading cause of death.

Conclusion: Upgrading existing infrastructure of the referral hospital with the availability of EMOC facility, reducing hypertensive disorders of pregnancy or eclampsia by imparting basic skill to the grassroots level workers to detect eclampsia at earlier stage would be crucial for reducing maternal deaths.

People's Confidence in Public Institutions and Social Networks: A Study Based on IHDS-2

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The social network and confidence in institutions are important social determinants which shape the medical preferences of an individual. This paper is an attempt to understand the social network a person is having with the medical personnel and other service providers, as well to understand the confidence a person is having in different health and other institutions. It examines the extent of personal acquaintances a person is having with doctors and other health workers within their caste and outside their caste and compares it with the personal acquaintances of individuals with other service personnel. This paper further examines the level of confidence shown by the people in different institutions. Trust is necessary at the individual level, as trust in particular hospitals and health care systems may affect individual's choice of services. The data from the India Human Development Survey-2 (IHDS-2) have been used for the analysis. The study shows that people have more acquaintances with those who work in health/education institutions and less contact with politicians and government employees. The study further reveals that individual contacts with medical personnel are more with persons from outside caste than within caste which signifies that while choosing medical services one does not put emphasis upon caste of the service providers. The study found that people have higher level of confidence in banks, military, courts and health and educational institutions in comparison to panchayats, politicians, etc. However, it is important to note that people reported higher level of confidence in private hospitals in comparison to government hospitals.

Feminization of Ageing in India

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Ageing is a triumph of development. Increasing longevity is one of humanity's greatest achievements. People live longer because of improved nutrition, sanitation, medical advances, health care, education and economic well-being. An average Indian at birth can expect to live for about 64 years, and life expectancy at age 60 is closer to 20 years (SRS, 2010). The process of ageing universally shows that there are a greater number of older women than men in the later years. This paper tries to assess the phenomena of 'feminization' of ageing in India. Females have higher life expectancy. The paper brings out the trends and patterns of sex ratio in later years of life, among the states of India for three consecutive Census years; 1991, 2001 and 2011. The number of states undergoing this process has increased from 6 in 1991, to 16 in 2001 and 17 in 2011. In the advanced age, widowhood dominates the status of women. The general trend of life expectancy especially at and after the age of 60 years of age has been compared between the sexes. The paper discusses the population characteristics of the women above the age of 60 years in terms of education and occupation with their male counterparts. It is seen that most of the aged women tend to work in as marginal workers than the males because of lower education. Unemployment remains low among the elderly female of the country but it's surprising to find a demand for work at this age.

Examining the Role of India's Health Financing System in Determining Household Health Care

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The nature of India's health financing system is progressive, i.e., health care expenditures of households and individuals rise proportionally with rise in their ability to pay. Also, budgetary allocation made by the Government to health sector is reducing year by year. In this backdrop, it would be interesting to know the changes occurring in the nature of India's health financing system and its impact on the provision of health care services to the people of the country. The present study finds that the health financing system of the country has suffered a decline in the degree of its progressivity over the period of 2004 to 2014, and has become less equitable. The household level analysis of health care expenditures indicates that a large fraction of households in India do not avail health care services and, therefore, they do not have any health care payments. This cannot be justified simply by saying that these households do not have any cases of illness, but by talking in terms of their accessibility and affordability of health care services. A large fraction of households also remain uncovered by any form of health insurance scheme. Thus, it is of interest to see whether insurance coverage has any indirect effect on the occurrence of health expenditures along with several other socio-economic and household

characteristics. The results suggest that insurance coverage does affect the choice of making health care payments and is responsible for a high degree of endogeneity in determining access to healthcare and consequently the level of expenditure.

Role of Training Programme Under Self Help Group in Securing Health of Rural Women

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The SHG training programme is initiative action after the SHG formation and credit linkage programme. It is rethinking prospect under SHG, for improvement of information and awareness level of women in rural areas. The wide range of training programmes disseminated through self-help group programme institution (SHGPI) and government institutions. These training programme initially implemented in southern region of India and gives positive impact on SHG women. After its successful implementation in southern region, it started working in Uttar Pradesh since 2002. The present study demonstrates the role and impact of training programme on health well-being and issues related to SHG women in rural areas. In this prospect, main question arises such as, what is organisation and structure of training programme to providing the information under SHG? What are the levels of training programmes to improving the women health awareness under SHG? Is training programme play significant role in rural area to improving health security under SHG? This paper aims to examine the organisation and structure of training programme under SHG, role of training programme on health awareness under SHG and their impact on SHG women in rural areas. This study based on a district of Uttar Pradesh with facts of primary data and the data are collected through Scheduled questioner in seven blocks of Sultanpur district.

A Study on Prevalence and Associated Risk Factors for Tuberculosis in India

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Tuberculosis is a major health problem in India. According to a recent World Health Organization report on tuberculosis, India has the largest pool of people infected with mycobacterium tuberculosis (tubercle bacillus) of any nation (WHO, 1997). Passive cigarette smoke and outdoor air pollution, which tend to produce lower exposures to pollutants than cooking smoke, have also been linked to increased risk of tuberculosis. This study examines the relation between biomass fuel for cooking, cigarette smoking, tobacco and alcohol consumption and the prevalence of active tuberculosis using

National Family Health Survey (NFHS-2) and (NFHS-3) data. Bi-variate analysis method was applied. The study revealed that the prevalence is higher in rural areas as compared to urban areas, also it was observed to be highest among people with low standard of living followed by Illiterates and it eventually decreased with increase in standard of living and education status. The prevalence was seen to be high among females those who use biomass fuels as compared to those who use cleaner fuels. The prevalence of Tuberculosis is high among males who smoke cigarettes, tobacco, drink alcohol, etc., as compared to females.

Prevalence of Asthma and Its Associated Risk Factors in India: Evidences from IHDS-II (2011-12)

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Background: Asthma is a major disease responsible for morbidity, worldwide. The prevalence is high among developed countries and is increasing in developing countries as well. In India, asthma accounts for 11 per cent of all respiratory disease deaths in 2013. This study attempts to find out the association of various demographic and life-style attributes with risk of asthma in India.

Methods: The study used the second round of Indian Human Development Survey (IHDS-II) conducted in 2011-12 covering 42, 152 households. For the analysis, asthma was defined as the person ever diagnosed with asthma or having short breath. Multi-variable logistic regression was fitted to study the association of various attributes with asthma.

Results: Prevalence of asthma was found to be 5.49 per cent. Individuals residing in urban areas (OR=0.73) are at lower risk of asthma than the rural areas. Asthma was found to be higher among children less than 15 years and persons above 70 years. There is a decreasing trend in the prevalence of asthma with increasing years of schooling. Smokers (OR=1.45) and tobacco chewers (OR=1.16) were at higher risk of having asthma. The individual residing in household with electricity (OR=0.71) are at lower risk of reporting asthma. Higher odds of reporting asthma was found among individuals residing in households using firewood (OR=1.26), dung cake (OR=1.15), crop residual (OR=1.15) as a fuel for any purpose.

Conclusions: The prevalence of asthma based on the symptoms is increasing in India. Age, education level, smoking, and solid fuel use were found to be significantly associated with the risk of asthma.

Impact of Frequency and Timing of Antenatal Care Visits on Neonatal Mortality in EAG States

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Background: Globally 5.9 million child-deaths occurred in 2015, in which 2.7 million were neonatal deaths (WHO, 2015). So, frequency of Antenatal care visits and timing of first ANC visit is important to offer information and advice to women about pregnancy-related complications and to reduce neonatal deaths in India.

Objective: We analyse the association between frequency of antenatal visits and neonatal mortality and also examine relationship between timing of first antenatal visit and neonatal mortality in EAG states and Assam in India.

Data: This study included Empowered Action Group (EAG) states which include Bihar, Jharkhand, MP, Chhattisgarh, Orissa, Rajasthan, UP, Uttarakhand and Assam also. We included 15,343 single births in preceding five years from third National Family Health Survey 2005-06. We estimate crude and adjusted odds ratios and their 95% CIs for association between frequency of ANC visits and neonatal mortality.

Results: The result shows that pregnant women who had more ANC visits experienced a lower risk of neonatal mortality and more benefit in 7-9 ANC visits significantly, the adjusted ORs against 0 visit group, was 0.48 (95% CI 0.28-083) and proportion of neonatal mortality in 7-9 visit group women is lowest 13/1000 live births. We also found that pregnant women, who had first ANC visit in first trimester, were experienced a lower risk (adjusted ORs: 0.62; 95% CI 0.43-0.91) of neonatal mortality.

Conclusion: In EAG states, strategies like extensive health promotion through healthcare persons and increasing level of education in women will have effect on ANC visits and MCH services in India.

State-wise Analysis of Change in Gender Inequality Towards Sustainable Development

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World moved from Millennium development goals to sustainable development goals and, in both development paradigm, to reduce gender inequality is a major component. In many international conference full participation of women being essential to achieving sustainable development. Using state level analysis, the present paper uses two pillars of gender equality and women empowerment in economic and social aspects. This paper investigates to what extent there gender inequality in education and employment may reduce with development. The paper finds difference of literacy rate and workforce participation rate among

all the states decreases from 2001 to 2011. The results show 5 per cent decrement in educational inequality at national level, whereas highest decrement in educational inequality is observed in Haryana with 14.6 per cent. Lowest gender inequality is observed in Nagaland and 3 per cent decrement in workforce is observed at national level. The analysis shows that gender inequality decreases with development. This decrease in inequality enhances the economic growth and a sustainable environment.

Demographic Transition and Household Health Spending in India

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The life expectancy at birth in India has increased from 50 years in 1972 to 66 years in 2010 and likely to be 69 years by 2020. The health expenditure is largely met by the households; 78% health expenditure is made by households compared to 20% by public. The study seeks to examine the pattern of institutional and non-institutional health spending, socio-economic and demographic differentials in health spending in India. Data used from two rounds of quinquennial consumption expenditure data collected by the NSSO surveys. Descriptive, multivariate, and the OLS are used to understand the relationship of life expectancy with Monthly Per Capita Spending on Health. Change in expenditure on inpatient care from 2004 to 2010 is more than changed in expenditure on outpatient care. Based on these findings it is suggested to increase the public spending for elderly so as to protect individuals and households from catastrophic health spending.

Prevalence and Determinants of Epidemiology of Anaemia among Children in Bihar, India

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Epidemiology of anaemia is a major public health concern in India. Worldwide, 1.6 billion people suffer from anaemia, of which two-thirds are preschool children. The present study is aimed to investigate the prevalence and determinants of anaemia among children aged 6 to 59 months in the state of Bihar. The National Family Health Services (NFHS) Round 3 data has been utilized for the study. Bivariate analysis and Multinomial logistic regressions were done for the fulfilment of the objective. Nearly 78 per cent of all children suffer from anaemia in Bihar. The result shows that with the increase in age the likelihood of anaemia amongst children decreases. Additionally, children residing in urban areas are at a lower risk of suffering from mild (34%) and moderate (54%) anaemia, respectively. The presence of severe anaemia among mother also increases the likelihood of moderate and severe anaemia by 11.5 and 15 times, respectively, amongst their children. The occurrence of diarrhoea, two weeks prior to the survey, increases the likelihood of severe

anaemia by three times. Children of the fourth and higher birth orders are 1.79 and 1.89 times more likely to experience mild to moderate anaemia. The children belonging to rich parents are 51% less likely to suffer from mild anaemia than children belonging to poor parents. The present study draws attention towards the severity of anaemia in Bihar, thereby showing a need to give a greater emphasis on the mothers anaemia, their respective living standards and fertility levels to tackle the issue better.

Epidemiology of Diabetes Mellitus and Their Association with Other Non-Communicable Diseases among Adults Population in India

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Aims: This study reports the results of the prevalence of diabetes and pre-diabetes in India. We presented the latest prevalence rates of a number of important non-communicable diseases and their risk factors in the India.

Methods: The results of this study are extracted from the DLHS-4 conducted in 2012-13. In the Survey information of blood sugar level and blood pressure have been taken for above 18 years persons total (N=838, 137 for diabetes) and (N=863, 971 for hypertension), respectively, using clinical diagnosis. Interviewer-administered questionnaires were applied to collect the data of participants including the demographics, alcohol, smoking, history of hypertension and diabetes. Anthropometric characteristics were measured and diabetes and pre-diabetes were assessed by measurement of random blood glucose load by capillary blood glucose samples. Diabetes (Random blood glucose ≥ 200 mg/dl), hypertension (SBP ≥ 140 mmHg, DBP ≥ 90 mmHg), obesity (BMI ≥ 30 kg/m2), and the prevalence rates were estimated.

Result: The weighted prevalence of diabetes was 13.19% in Kerala, 9.28% in Goa, 8.59% in Pondicherry and 6.17% in Maharashtra. The prevalence of CVD among persons who have diabetes and hypertension were 2.4% and 1.8% respectively. The result showed that those persons who have diabetes increased the odds of CVD (OR, 1.4; 95% CI, 1.30-1.44) as compared to persons without diabetes. Those persons who have hypertension had the higher odds of CVD (OR 1.2; 95% CI, 1.12-1.22) as compared to person without hypertension. Multiple logistic regression analysis showed that age, sex, urban residence, caste, generalized obesity, hypertension and SLI were significantly associated with diabetes.

Undernutrition Status of Children Under Five Years of Age by Poverty Status of Their Households: A Cross-Country Analysis

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Undernutrition is prompt in low-income and developing countries and is much prevalent in Southern Asia, and Sub-Saharan Africa has gained attention. To reduce the number of malnourished children

has been one of the major concerns of national governments irrespective of their level of developments and political ideology. The resolution to why child malnutrition rates in South Asia were higher than in Sub-Saharan Africa (Smith and Haddad, 2000) noted that higher poverty in South Asia, may also partially explain the regional differences. Children belongs to non-poor households, in general have more advantages over poor for all indicators of Undernutrition. More than half of the Indian children living in poor households are underweight. Prevalence of being malnourished among South Asian poor is much higher than Sub-Saharan African poor. In Pakistan, irrespective of the residence, the prevalence of underweight among children living in poor households is almost twice that of children living in the non-poor households. Overall, very fewer differences were found in the prevalence of wasting among children whose mothers are illiterate. Prevalence of stunting among Indian and Nigerian children whose mothers were overweight is noticeable, that is, prevalence among children living in poor households was more than twice that of children living in non-poor households. The differential in wasting among Bangladeshi, Ghanaian and Zimbabwean children were less as compared to rest of the selected countries. It is difficult to eliminate poverty and associated excess undernutrition among the poor quickly in all the regions. Hence, providing food securities and supply proper nutritious food to poor children is recommended.

Violence Against Women, Its Prevalence and Health Consequences: The Case Study of Domestic Working Women of Navi Mumbai

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Background: Domestic violence has unwanted effect on the wellbeing of women which have recognised as global health problem. Violence perpetrated by intimate partner is one form of Domestic violence, a serious human rights abuse. The true problem of these women is unknown so this study tries to assess the prevalence of violence and its health consequences among domestic working women in the slums of Navi Mumbai.

Methods: A community based cross study was conducted among women working as domestic workers in slums of Navi Mumbai. Qualitative methods like Key Informant and the Snowball samplings were used. Sample of 65 women is being taken from an NGO and remaining 40 women is collected through snowball sampling, so total sample size is 105. Data were entered and analyzed using SPSS software.

Results: The proportion of spousal domestic violence was 81 (77.1%). Physical, emotional and verbal abuse is more followed by physical. Around 77 per cent reported husband has the habit of drinking alcohol. Factors like early marriage, husband drinking alcohol habit, husband occupation, education are some of the important factors of Domestic violence. Domestic violence reported common health complication such as headache, eye problems, respiratory problems, nausea and vomiting, back pain. Reproductive health problem like excessive bleeding during menstrual cycle, extended periods, period more than one month, lower abdominal pain associated with periods, cramps in stomach. Domestic violence is widespread and its rates highlighting the urgent need for government and civil society to address the issue and end this scourge that hinders progress towards nation's development goals.

Correlates of Caesarean Section Delivery in West Bengal: An Analysis Based on DLHS-3

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Background: It has been well recognised that medically unnecessary caesarean section delivery could increase morbidity risks for both the mother and her child; and unnecessary medical interventions and C-section delivery could put strain on both institutional and individual assets.

Objectives: On the basis of these observations, the present study tried to assess the levels and trends of C-section delivery rates and to examine the factors associated with C-section delivery in West Bengal.

Data and Methods: Data from the third round of the District Level Health Survey (DLHS-3) 2007-08, covering 6, 447 ever-married women of age 15-49 years has been used. The predicted probabilities from logistic regression analysis have been computed to measure the net effect of independent variables on the dependent variable.

Results: The results have shown that about 12 per cent women delivered their babies by C-section and rest of the 88 per cent women delivered their babies normally or through assistance in West Bengal during the reference period preceding the survey (DLHS, 2007-2008). After excluding the home deliveries, the percentage of C-section delivery rise to about 24 per cent. The results of estimated predicted probability computed from logistic regression reveal that delivery in private health facilities; lower birth order and higher level of education are the strongest predictors of C-section delivery. Besides, higher number of ANC visits and higher maternal age are also significant factors of C-section delivery.

Conclusions: For the betterment of women and child health and appropriate use of resources the universal guidelines, protocols and medical audit on caesarean section delivery should be implemented.

Self-Reported Prevalence of Chronic Non-Communicable Disease and Associated Determinants among Older in India

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The primary aim of the study is to investigate the self-reported prevalence of major chronic Non-Communicable Diseases and their predictors among older in India. As the number of elderly in India is growing, there are around 103 million older persons in India (Census, 2011). By using the Building Knowledge Base on Population Ageing in India (BKPAI) data (2011), the study investigates the prevalence and the associated factors related to self-reported chronic non-communicable disease

basically (Arthritis, Stroke, Angina, Diabetes, Chronic Lung Disease, Asthma, Depression, High Blood Pressure, Cataract). The exposure variable were socio-demographic characteristics such as place of residence, age, gender, education, caste, marital status, and wealth status. Multivariate logistic regression was used to determine socio-demographic determinants predictive of the presence of chronic NCDs. The analysis results show that the prevalence of chronic non-communicable disease was 58.02%. Arthritis is more pronounce chronic diseases among given NCD followed by High Blood Pressure and cataract in India. The prevalence of multi-morbidity (1+ Chronic disease) was 23.6%. Multivariate logistic regression analysis showed that being female, being in age groups 60-69, 70-79 and 80 and above, being OBC caste, having no schooling and primary level of schooling, having greater wealth, being currently not married and residing in a rural area were associated with the presence of NCDs. The rising burden of NCD is more affecting at an older age and put a heavy burden on the health care. However, due to the economic problem, it needs more demand of health care service.

Quality of Life and Health-Seeking Behaviour of Depressed Persons in India

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Depression is a significant contributor to the global burden of disease and affects people in all communities across the world. The World Mental Health Survey conducted in 17 countries found that on an average about 1 in 20 people reported having an episode of depression. Present study is an attempt to understand the various dimensions of depression utilizing the secondary data from study on global ageing and adult health (SAGE), India. This is implemented in six states – Assam, Karnataka, Maharashtra, Rajasthan, Uttar Pradesh and West Bengal. A separate bivariate analysis and multivariate logistic regression analysis are carried out to examine the socio-economic and demographic factors, risk factor (body mass index) affecting the dependent variables used in the study, i.e., depression and assess the quality of life of depressed person. The study reveals that the prevalence of Symptom-based depression is higher than self-reported. It is found to be highest in both less developed and more developed states, Uttar Pradesh and Karnataka. It is found high in person with higher age, low educational level, poor, in currently married and widowed/divorced/separated. Quality of life and World Health Organization Disability Assessment Schedule (WHODAS) is used to examine the quality of life or well-being and disability of person having depression. The study also found that the Quality of Life of depressed person is worst than non depressed person. Unmet need for medication and treatment is found to be high for depression.

Thinking it Through: Inequality in Care Work and Challenges to Women's Health

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Gender inequality exists with unusual complexities in different social and income class of society; is a critical debate in concern to secure women health in totality. Intra household unpaid care obligations deeply rooted with patriarchal configuration of society is an unrevealed and ignored faces of gender disparity in the context of women health security and at health policy agenda; from where the first layer of exclusion and gender discrimination takes place. The significant attempts made by international organizations (WHO, World Bank, UNDP, ILO, UNICEF) have consistently highlighted the issues of disparity in division of intra household unpaid care work associated with immense unpaid time and strenuous labour; and its consequences to time poverty, health and capabilities of household care worker. In this prospect, the inquiry arises to look into: Is developing nations aware with the issue? What is the complexity and magnitude of unpaid care work? How it affect the lifestyle, working style and health of female caregiver in long term? Why females are usually unhealthier than men? What are the challenges to cope out the problem? This paper is an empirical attempt to highlight the issue of gender disparity in distribution of unpaid work and its long-term impact on women's health with the help of primary data analysis. The paper has delineated into five sections followed with introduction of the paper, conceptual understandings, literature survey, empirical evidences, outcome and conclusion.

Risk and Determinants of Osteoporosis in Older Adult Males of India

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Background: Osteoporosis is one of silent diseases in India which is not recognized as major health problem among the population aged 50 years or above. The estimated prevalence data suggest that there are approximately 50 million osteoporosis patients in 2015 throughout the country.

Objective: Objective of the study is to assess the Osteoporosis Self-Assessment Tool (OST) as a screening tool for predicting osteoporosis in Indian Men and to estimate district level population at high risk of osteoporosis using DLHS 4 data.

Data and Method: For assessment of OST, total 257 adults of age 50 or more were included in the primary study. Each subject underwent a detailed clinical, dietary, anthropometric, and biochemical assessment and bone density measurement.

Results: OST index ≤ 2 predicted osteoporosis with a sensitivity of 95.7% and a specificity of 33.6% when compared with the bone mineral density results. These results were used to determine the high risk population of osteoporosis. Approximately 18% older men were at high risk of osteoporosis. Finding suggests adult male from Meghalaya (24%), West Bengal (23%), Karnataka (22%), Maharashta (21%)

and Tripura (20%) have maximum risk of osteoporosis. Smoking is one of the factors associated with the risk of osteoporosis as usual smokers have twice chance of having bone loss in comparison of non smokers.

Conclusions: OST is a useful tool for measuring BMD and risk of osteoporosis in Indian older adults and can be used extensively at primary health care set-ups without any extra economic burden. The prevalence of elevated risk individual for osteoporosis is very high.

Assessment of Cost Components of Non-Communicable Diseases Using Cost-of-Illness Approach

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Health and development are inextricably linked-one cannot be achieved without the other. As a result, three of the Millennium Development Goals (MDGs) specifically address health. However, none of the MDGs makes specific mention of conditions which cause the most death and disability, i.e. Non-Communicable Diseases (NCDs). These diseases cause 60% of all deaths globally, 80% of which are in low and middle-income countries (WHO 2011). These diseases target especially productive age-groups and therefore, hinder workforce productivity and economic development. The challenge to public health specialists is to anticipate and avert an epidemic of NCDs. Considering this, the paper examines financial burden of NCDs for low and medium levels of fertility to estimate the magnitude of the costs and losses associated with NCDs in India. The study concludes that though the prevalence of NCDs was higher among the aged population, maximum burden of medical expenses, non-medical expenses and loss of household income has been shouldered by the age-group 35-59. Cardiovascular diseases (CVDs) contributed maximum to the total cost incurred by the inpatients of NCDs and it is expected to be the most extortionate NCD in the years to come. Results of the estimated number of NCD patients revealed that the patients of CVD are expected to account for the greatest share by the year 2050. Our study showed higher figures for medium level of fertility against low level. Accordingly, it is suggested that the investment on prevention and control of NCDs needs to be a valuable focus for India to save its human and financial resources.

The Influence of Husbands on Contraceptive Use by Women in India: A Study Based on DLHS4

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In most of the developing countries, husband's disapproval of family planning is still a major deterrent factor for woman's fertility control. This study seeks to investigate the factors affecting

husband's perspective to motivated or facilitated to use the contraception. Further, to examine the woman's perception of her husband's approval of family planning on her current use of modern contraception, after controlling selected socio-economic and demographic factors. The data from the District Level Household and Facility Survey-4 (2012-13) has been used for the present study. It is a nationally representative sample survey of ever-married women, ages 15-49 years. Results show that the husbands were approved 1.16 times more to use of contraception in urban areas as compared to rural areas. It was also found significant among those who belongs to other caste (1.52, $p<0.000$) and other religion (1.17, $p<0.000$) compare to their counterparts. Education is another determining factor for use of modern contraceptive. Other factors like duration of marriage, desire of children and wealth quintile also found positive association with contraceptive use. Overall, this study suggest that modern contraceptive use is high among those women whose husbands approve or facilitate the family planning than their counterparts. The effect of husband's approval in modern contraceptive use is high for female sterilization (4.82, $p<0.000$), pills (3.73, $p<0.000$) and IUD (1.933, $p<0.000$). Husband's approval does appear to be a major determinant of contraceptive uptake in developing countries. The more effective male targeting programs may be necessary to maintaining the success of the family planning programme in future.

Linkages Between Consanguinity and Survival of Marriages in Southern India

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The Indian sub-continent, a place that is known for plentiful differing qualities, reflected in vast congregation of castes and tribes, excessively depicts changed and confined marriage traditions and norms. Marriage in Indian society is a religious duty. Consanguineous marriage is common, where individuals prefer to marry within their clan. Consanguineous marriages have a higher incidence of divorce, separation, and remarriage than unrelated marriages in India. Divorce has important effects on family and community. In India where consanguineous marriage is common, there is a link between consanguinity and divorce which is highly important. To the best of our insight, there is no study concerning the linkages between consanguinity divorce and comparison of survival investigation of marriages between consanguineous and unrelated marriages. In this way, the present case-control study was done. The results indicate that consanguinity has some protective role(s) against divorce and also survival of marriages increased among consanguineous marriages. Taken together it might be concluded that consanguinity has social advantages. With the passage of time a general tendency for decrease in consanguinity rate have been found. Several factors like educational status; urbanization and industrialization; deviation from the traditional way of mate selection, etc., plays a role in minimizing the trend. On the other hand, consanguineous marriages are associated with increased risk of recessive traits and also it might be associated with many multifactorial diseases. However, activities for reduction of consanguinity, which is culturally favoured in population, without attention to its social reflections, are not recommended.

Child's Nutritional Status in a Household: A Study of Rural India

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The present study is an attempt to understand the nutritional status among the children of different birth orders considering their parent's education in that household. The aim of this paper is two-fold: i) to examine the level of child's nutrition by their parent's education and awareness ii) to explore the variation in the nutritional status by the birth order of the child. In this study National Family Health Survey data round three (NFHS-3) has been used. Stunting, wasting and underweight these three measures are taken to check the nutritional status of a child. Other than the two key predictor variables-parent's education and birth order of the child, different socio-economic and demographic variables have been taken and controlled. To explore the associations bivariate and multivariate analysis has been done. A Probit estimation has been adopted to check the statistical associations. Preliminary results suggest that in rural India more than half of the children (51 per cent) are stunted and there is a significant gap with urban India where 40 per cent children are stunted. According to the mother's education, the nutritional status is also varying dominantly. If we look at the birth order of the child there also, we can see that there is a significant gap in nutritional status among the children. Analysis suggests that these two factors are crucial to determine the nutritional status of rural children. This could be an indication of social exclusion that rural India is facing and, thus, the rural children are vulnerable in terms of their nutritional health.

Environment and Its Change Due to Various Gas Emission and Health Condition of Different States in India

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Since we share everything on Earth with every living thing on the planet, what happens in one area affects everything too, no matter how far away. Pollution in our environment has negative effects to the eco-system or our daily life we rely on. Air pollution is a major environmental health problem affecting the developing as well as developed nations. Pollutant agents like sulphur oxide, carbon monoxide, nitrogen oxides, suspended particulate matters (SPM 2.5, 5, 10), etc., has both acute and chronic effects on human health affecting a number of different systems and organs. This paper tries to search trends and pattern of various diseases of various states in India over the period and time and correlate it with the environmental degradation as air pollution. Central Pollution Control Board data, NFHS, DLHS, Census, World Bank data are taken for the analysis. Regression, bivariate and multivariate models are used for the analysis with the help of SPSS software. So it is observed that there is a significant relationship with increasing gas emission and health diseases. But it is also observed that the significant rate is fluctuating among Indian states. Maharashtra, Kerala, Punjab, Chandigarh,

Karnataka, Goa, etc., developed states has increased gas emission over the period of time, but in the case of per capita it is less. And with this number of diseases are less (Air pollution diseases like acute respiratory, Tuberculosis, etc.).

Gendered Differentials in Morbidity, Response to Illness and Resilience among Individuals in the Context of Emerging and Re-emerging Infectious Diseases in Kerala

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The present epidemiological context of Kerala is marked by the emergence and re-emergence of infectious diseases, which has been identified as a major public health concern in the state. However, there exists differential consequence of diseases on individuals and households according to their socio-spatial positioning and other structural inequalities. In this context, the present study explores the gendered impact of infectious diseases with special focus on vector borne diseases such as Chikungunya, Malaria, Dengue and Leptospirosis. The study majorly focuses on the morbidity patterns, response to illness and the resilience mechanisms adopted by individuals in association with these diseases. The study adopted a mixed methodology and employed a primary survey among 430 individuals who had any of the select communicable diseases in the district of Thiruvananthapura. The study examines if there is any gendered differentials in treatment seeking behaviour, response to illness, disease management and resilience during the disease episode. The results show that the morbidity patterns and response to illness among the individuals are significantly governed by gender differences. Pre-determined gender roles and expected altruistic behaviour put women at risk of neglecting their health and prevented them from accessing effective treatment and care. This paper also discusses the ways in which women had effectively made use of formal and informal networks to access informal care and financial support during the sickness episode. The results highlight the gendered aspect of infectious diseases, which is an imperative for the policy makers to initiate a gender analysis of health needs of the community.

Urbanization and Development in Million Plus Cities of Maharashtra

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Maharashtra is one of the most urbanized states (31.16 per cent) in India and the highest per capita income in the country but its urban population is mostly concentrated in few major cities. For this skewed distribution, present study attempts factors influencing the level of development in million plus cities of Maharashtra. Development was measured by four sectors common minimum needs, economic development, human

resource, maternal and child health development with different sources. Statistical techniques ranking method, indexing method and principle components methods for being used at district level. Regional disparity in socio-economic development has become an extremely sensitive issue in Maharashtra. The level of development in Maharashtra observed that 33 out of the 8 districts listed as developed, many five belonged to the Western Maharashtra Region, where as only two districts from the Konkan only one from Vidarbha region. These districts have been high per cent of the urban population. This is the justification of variation in the level of urbanization is closely related to the variation in the process of development. The process is linked to urban development which represents the holistic development of million plus cities or smart cities of India. Smart cities development, which boosts the secondary sector and reduces the dependence on primary sector, is considered as a symbol of economic growth and development.

The Sexual and Reproductive Health Awareness among Unmarried Youth in India

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This paper describes the awareness about sexual and reproductive health among unmarried youth in India. This paper tries to find the association of awareness among unmarried youth about sex, pregnancy, contraception, STI, HIV, etc., awareness regarding legal aspects of abortion and understanding the perception of youth relating to ideal age for sex and family life and sex education. To achieve the above objectives, data from The Youth in India: Situation and Needs 2006-2007 study Conducted by IIPS (Mumbai) were taken and Descriptive analysis using cross-tabulation in SPSS and Chi-square analysis have been used. The fact that 10–24 years old account for 30 per cent of India's population and 31 per cent of the AIDS cases in the country has added urgency to addressing the reproductive and sexual health needs of this age-group and trend of daily life style among the youth is changing very fast and, in this transition period, number of factors both at individual or social level, affect them especially in sexual and reproductive health perspective. Hence, it is very important to understand the perceptions and the level of awareness about sexual and reproductive health among youth in India for tackling the sexual and reproductive health problems.

Migrants and Their Health: A Review of the Impact of Migration on the Health of Immigrants in Urban Areas

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Migration is an important component of population dynamics. According to the National Sample Survey 2007-08, the number of migrant households was 33 per 1000 households in India for urban

areas. Generally, households from rural areas migrate to urban areas for job-related motives, education purpose, procurement of own house, health care, post-retirement, marriage, and so on and so forth. Migrant population, being non-local, is vulnerable and is exposed to many health related problems, this increases the rate of morbidity among migrants. Most of the health problems of migrants leading to morbidity arises because of decreased awareness about local health facility, inability to cope with psychological stress, unhealthy sexual practices, job related stress, financial stress, food insecurity, inability to adapt with climate, etc. Present study tries to focus on the concept, causes and effects of migration on health status of migrants of urban areas and attempts to give some possible solutions, which will help to overcome the problem.

Health Awareness: A Study of Adolescent and Young Adult Urban Women

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'You are what you eat' is a saying that is often heard and spoken by many. In an era of increasing trend in the number of diseases, one needs to be more aware of and cautious about their lifestyle choices. The World Health Organization (WHO) defines health as 'a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity'. Health awareness is a holistic conscious approach towards one's diet and lifestyle choices. The purpose of this study is to find out the level of awareness among adolescent and young adult literate urban woman. According to Erik Erikson, an adolescent is a person between the age group of 13-19 years whereas a young adult is between the ages of 20-39. The Indian Census, since 1991, defines literacy as the ability of a person aged seven years or above to read and write with understanding. Purposive sampling technique was used to collect data through a self-administered questionnaire based on closed-ended questions with a dichotomous scale. The study aims to find out the level of health consciousness among women who are the foundation to nation building and a pillar which supports and nurtures the future of the country. A woman's health determines the health of her child and thereby her family and the country at large and more efforts are needed, apart from the ones which already exist, to make the women of today healthier for a stronger tomorrow.

Suffering from Violence: A Case Study of Homeless Women in Delhi City, India

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Violence and sexual abuse were universal in the worlds of homeless women. They are showing too physically and sexual violence, drug abuse and different types of violence. Homeless women in Delhi

face acts of violence on an everyday basis, including verbal, physical and sexual abuse, also economic and social exploitation, which severely affects their mental and physical health. Women who sleep on railway platforms, pavements, bus stops and other open areas suffer several forms of violence. They are all so without housing and living on the streets suffer the most severe kinds of abuse and violence. This paper attempts to highlight the causes and characteristics of homelessness, the nature of violence faced by homeless women. Qualitative study conducted in Delhi city among the homeless women community. In-depth interviews were conducted with each of these respondents for a period of six months. Each interview was written as a complete narrative. It is hoped that this paper will draw attention to the difficulty of one of our society's most marginalized populations.

Prevalence of Type II Diabetics and Its Risk Factors among Puducherry Population

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Introduction: The present study aimed to identifying the prevalence and its risk factors of Type 2 diabetes among the Puducherry population.

Methodology: A Cross-sectional study was conducted among the Puducherry population. Samples were selected from 10 urban and rural Primary Health Centres and special diabetic camps. 4,870 volunteered to get tested for prevalence of T2D. Out of total 4870, 695 were found to be diabetic and 417 as pre-diabetic. The data was analyzed using SPSS version 20.

Results: Of the total 4,870, 1,112 (22.83%) samples were found to be diabetic and pre-diabetic samples. From 1112, nearly 261 females and 156 males were found to be pre-diabetic and 365 females and 330 males were observed to be diabetic. 50% of pre-diabetic males and females were between 30 and 49 years and almost equal 40% of the diabetic male and female population between the age group of 30-49 years. 5% of the pre-diabetic and diabetic population were not doing physical exercise. 48.9% of them were unaware about prevalence of T2D. From anthropometric assessments more than 84% of the pre-diabetic and more than 88% of diabetic male and female population had high waist circumference (WC), waist to height ratio (WHtR) and BMI.

Conclusion: Thus, the prevalence is alarming among young adults and most of them were overweight and morbidly obese due to lifestyle changes and food faddism. To overcome, it is imperative to inculcate food habits and life style modification from the childhood itself so as to have a strong future India.

The Role of Household Head's Education in Utilization of Maternal and Child Health Care Services in Bangladesh

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Household Head (HH), in most context act as a key decision maker and a key determinant of health care services utilization. Here, we want to know whether household heads education also influence maternal and child health care services utilization like parent education. The present study has used data of the sixth and fifth round of Bangladesh Demographic and Health Survey (2011 and 2007). The Chi-square test was used to demonstrate the effects of the household head's education on the utilization of maternal and child health care indicators. First, the analysis was conducted for all children and then the same way analysis performed for biological and relative children. The utilization of both maternal and child health services more for the household head has primary and more education than the household head has no education. For all indicators of maternal health and child health in Bangladesh as a whole country, urban as well as rural and in both round the utilization of services increases with increase in education level of HH. The influence of HH education more profound in 2007 than 2011 for prenatal care, immunization and Vitamin A, it is opposite for facility delivery in Bangladesh as a whole country. In BDHS-VI, the impact of HH's education more for maternal health care than child health care services utilization except for baby postnatal check-up. In health care services use as an individual factor and an important household factor.

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Notes

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